



**2001 - 2002  
ELECTRICAL WIRING  
MANUAL**

**MINOTOUR**

# **2001 - 2002 MINOTOUR ELECTRICAL WIRING MANUAL**

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**This manual covers:  
Units manufactured between  
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## General Recommendations - Maintenance and Repair

The following comments may be helpful in avoiding some of the most common problems experienced over the life of the bus.

### 1. Shorts in Cables and Harnesses:

Cables that chafe or dangle will eventually wear through the insulation and result in a short. This can also cause terminals to loosen at their terminal point. Many times a mounting clip is removed to permit access to another component or to service that particular harness/cable. ALWAYS reinstall the mounting clips to their original position.

### 2. Corrosion in Sockets and Terminals:

This can be a serious problem on units operating on streets and highways using salt and sodium chloride products.

The use of an anti-corrosive sealant, such as Graffo 116 to coat exposed connectors, switches, and ground terminals, is very helpful in deterring corrosion in such areas.

The use of a dielectric grease to coat the base and sockets of bulbs will deter the formation of corrosion in lamps exposed to road contaminants. It, also, reduces road shock in the bulb filaments.

### 3. Circuit Resistance:

Circuit resistance is usually caused by loose terminals at the point of termination, improper crimping of replacement terminals onto the wire, and unprofessional splicing of two wires together.

Practically all replacement terminals require a special tool to insure a complete, secure bond of the terminal and the wire. If the proper crimping tool is not available, the terminal should be soldered to the wire, using a rosin flux solder. Always cover the end of the terminal with a one inch piece of heat shrink tubing to prevent the entrance of water, salt, etc.

Twisting the wires together is acceptable only if the union is then soldered with rosin flux solder, and covered with a heat shrink tubing extending one inch on each side of the union. Butt splices are also common in such a repair. Again, cover the splice with heat shrink tubing.

Wiring left improperly sealed will corrode, and the corrosion can wick up the entire length of the wire. **Figure 1** is an example of the proper way to splice two wires together.

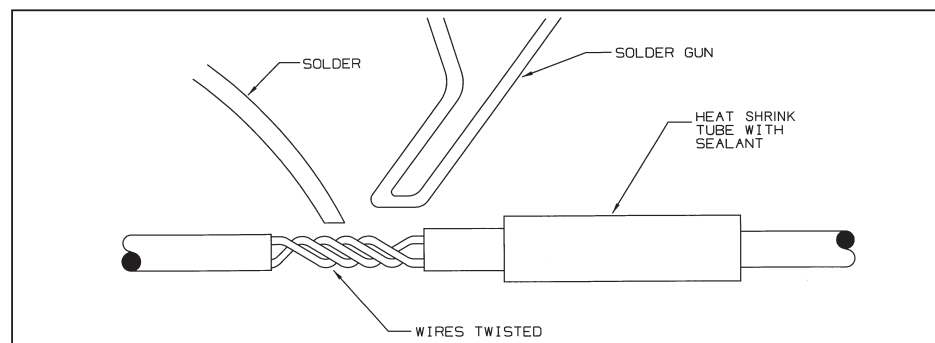


Figure 1

### 4. Overloaded Circuits:

Additional electrical components should not be added to existing circuits. There is room for additional circuit breakers on the side electrical panel, if additional options are added in the field.

### 5. Proper Diagnosis:

Thorough diagnosis is a must to eliminate repeat failures in the electrical system. Determining the cause of a particular failure not only solves the problem on the unit involved, but it may be helpful in preventing failures on other similar units in the fleet.

In the event a particular circuit breaker continues to trip, even though no short is found, it would be wise to check the circuit flow on that circuit and compare it to the rating of the circuit breaker. The circuit breaker may be tripping below its rating, or the current draw may be in excess of the breaking rating.

To check current draw on any given circuit, connect an ammeter in series between the circuit and a battery terminal. Energize the circuit and read the amps registered on the ammeter.

## System Protection from Short Circuits

The electrical system has three means of protection from damage due to a short circuit in the total system:

1. Each circuit is protected by an automatic resetting circuit breaker. In some instances a circuit breaker may accommodate more than one circuit; however, in no case would the combined load be in excess of the rating of the circuit breaker if all the circuits were energized at the same time. In the event such a circuit breaker is tripping all the time it will be necessary to check out each circuit using that circuit breaker.
2. A 150 amp manual-reset Master circuit breaker is located on the front electrical panel of the MVP-EF, and on the rear electrical panel of the MVP-ER, ER-Transit and TL960. This will protect the electrical system from damage that may occur from a major short in any area not protected by a fuse or automatic circuit breaker. This circuit breaker must be manually reset in the event it trips. When the breaker trips, the small RED button will depress. To reset it, move the small black lever located on the left side of the breaker back against the body of the breaker. When the electrical system has to be taken out of service to make other repairs, the master breaker can be tripped by depressing the small RED button in the center of the breaker.

In the event the Master breaker should trip more than once, the cause **MUST** be determined before placing the bus back in service.

3. In the unlikely event a battery cable should short out against a chassis component, the 2 AWG engine-to-chassis ground cable will fail. This cable is attached to the engine block on the right side and is connected to the right frame rail.

In addition to the above precautions to minimize damage from an electrical fire, the insulation on all wiring is of a crosslink polyethylene composition which will not maintain combustion once the copper core of the wire cools. The same applies to convoluted tubing used to protect harnesses and tubing from chafing and the elements.

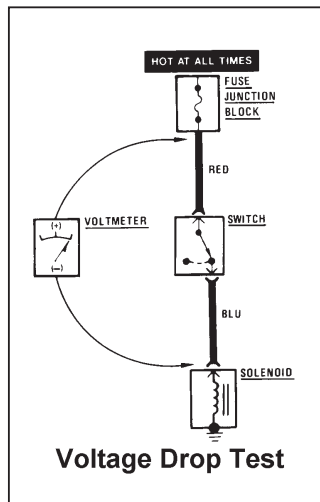


Figure 2

4. Operate the short finder. The short finder will pulse current to the short. This creates a pulsing magnetic field surrounding the circuit wiring between the fuse junction block and the short.
5. Beginning at the fuse junction block, slowly move the short finder meter along the circuit wiring. The meter will show current pulses through sheet metal and body trim.

As long as the meter is between the fuse junction block and the short, the needle will move with each current pulse. When you have moved the meter past the point of the short, the needle will stop moving. Examine the wiring in that area for the short to ground. See **Figure 3**.

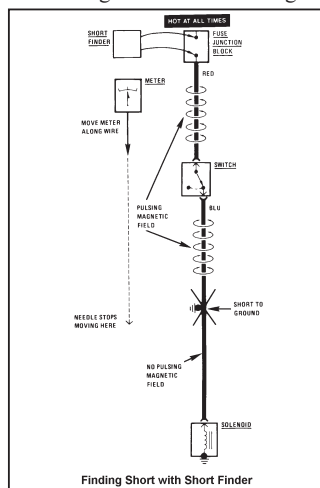


Figure 3

## Testing for Voltage Drop

This test checks for voltage being lost along a wire, or through a connection or switch. See **Figure 2**.

1. Connect the positive lead of a voltmeter to the end of the wire (or to the side of the connection or switch) which is closest to the battery.
2. Connect the negative lead to the other end of the wire (or the other side of the connection or switch).
3. Operate the circuit.
4. The voltmeter will show the difference in voltage between the two points. A difference (or drop) of more than one volt indicates a problem.

## Testing for Short to Ground

1. Remove the blown fuse, leaving the battery connected.
2. Connect the short finder across the fuse terminals.
3. Close all switches in series with the circuit you are troubleshooting.

## Checking Current Draw

1. Connected in series IN a circuit according to polarity.
2. Measures current flow.
3. Used in a closed circuit. See **Figure 4**.

## Troubleshooting Tools

Electrical troubleshooting requires the use of common electrical test equipment.

### Test Light/Voltmeter:

Use a test light to check for voltage. A Test Light is made up of a 12-volt light bulb with a repair of leads attached. After grounding one lead, touch the other lead to various points along the circuit where voltage should be present. When the bulb goes on, there is voltage at the point being tested.

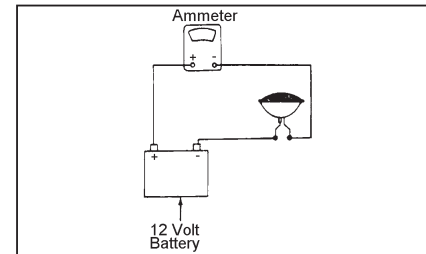


Figure 4

A voltmeter can be used instead of a test light. While a test light shows whether or not voltage is present, a voltmeter indicates how much voltage is present.

Never use a test light on circuits that contain solid state components, since damage to these components may result.

### Jumper Wire:

A jumper wire is made up of an in-line fuse holder connected to a set of test leads. It should have a five ampere fuse. Use it for bypassing open circuits. Never use a jumper wire across any load (motors, etc.). This direct battery short will blow the fuse. See **Figure 5**.

### Short Finder:

Short Finders are available to locate hidden shorts to ground. The short finder creates a pulsing magnetic field in the shorted circuit and shows you the location of the short through body trim or sheet metal.

## Troubleshooting Tests

### Test for Voltage:

1. Connect one lead of a test light to a known good ground. If you are using a voltmeter, be sure it is the voltmeter's negative lead that you have connected to ground.
2. Connect the other lead of the test light or voltmeter to a selected test point (connector or terminal).
3. If the test light glows, there is voltage present. If you are using a voltmeter, note the voltage reading. It should be within one of measured battery voltage. A loss of more than one volt indicates a problem. See **Figure 6**.

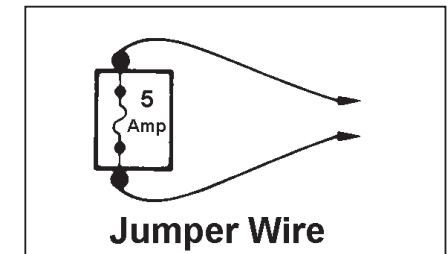


Figure 5

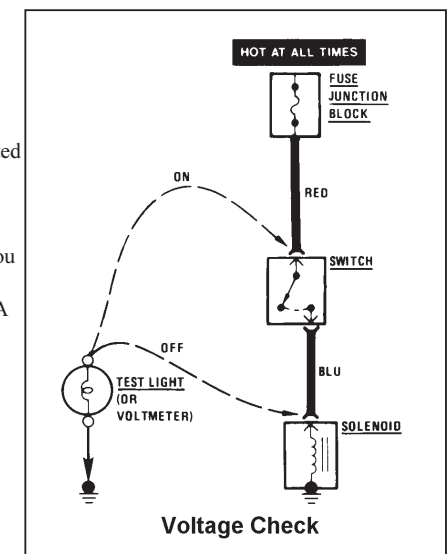
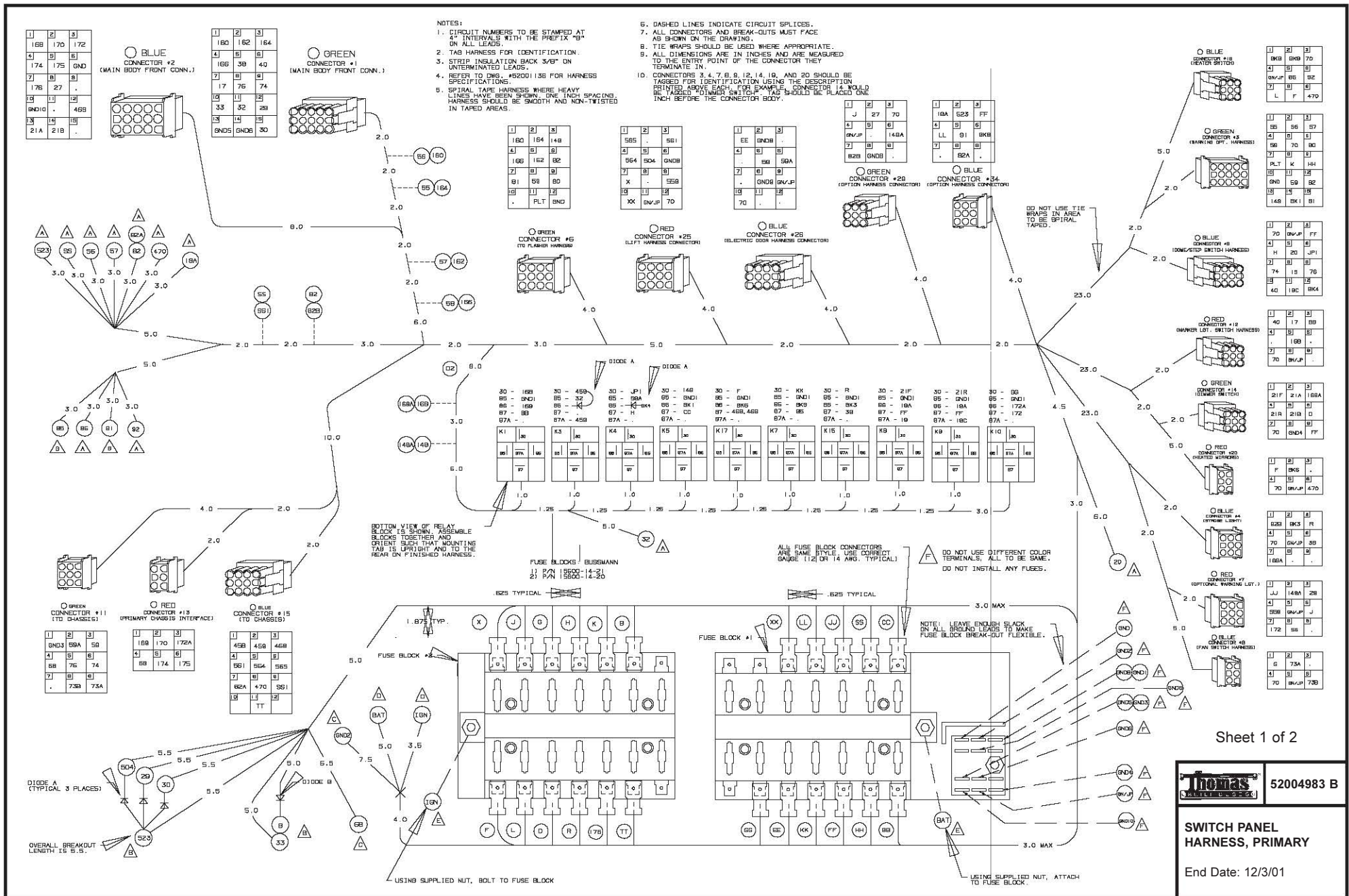


Figure 6

**PANEL  
SECTION**







CONN	VENDOR	PART #	DESCRIPTION
2, 3	AMP	770030-1	15 POSITION CONNECTOR, CAP
	AMP	XX	14-16 GA TERMINAL, PIN
	AMP	XX	10-12 TERMINAL, PIN
1	AMP	770023-1	15 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA TERMINAL, RECEPT.
	AMP	XX	10-12 GA TERMINAL, RECEPT.
9, 15	AMP	770022-1	12 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA TERMINAL, RECEPTICAL
	AMP	XX	10-12 TERMINAL, RECEPTICAL
6	AMP	770029-1	12 POSITION CONNECTOR, CAP
	AMP	XX	14-16 GA TERMINAL, PIN
	AMP	XX	10-12 TERMINAL, PIN
8	AMP	770027-1	6 POSITION CONNECTOR, CAP
	AMP	XX	14-16 GA TERMINAL, PIN
	AMP	XX	10-12 TERMINAL, PIN
12, 14	AMP	770021-1	9 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA TERMINAL, RECEPT.
	AMP	XX	10-12 GA TERMINAL, RECEPT.
4, 7	AMP	770028-1	9 POSITION CONNECTOR, CAP
	AMP	XX	14-16 GA TERMINAL, PIN
	AMP	XX	10-12 TERMINAL, PIN
11, 29	-	-	-
	-	-	-
	-	-	-
DIODE A	-	-	1 AMP 400 VOLT.
DIODE B	-	-	6 AMP 400 VOLT.
RELAY BLOCKS	HELLA	87122	HOUSING-RELAY, 5 POSITION.
	XX	XX	TERMINAL-FEMALE, 1/4", 14-16 GA.
	XX	XX	TERMINAL-FEMALE, 1/4", 10-12 GA.
PART	VENDOR	VENDOR P/N	DESCRIPTION
BLOCK #1	BUSSMANN	15600-14-21	14 POSITION WITH GROUND BUS
BLOCK #2		15600-14-20	14 POSITION FUSE BLOCK

NOTES:  
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.  
2. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.  
3. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.

PART	VENDOR	VENDOR P/N	DESCRIPTION
A	XX	XX	BUTT SPlice, 14-16 AWG.
B	XX	XX	FORK SPADE, #10 STUD 14-16 GA.
C	XX	XX	RING TERMINAL, #10 STUD 14-16 AWG.
D	XX	XX	RING TERMINAL, 5/16", 8 AWG.
E	XX	XX	RING TERMINAL, #10 STUD, 8 AWG.
F	AMP	520974-2	10-14 GA, 1/4" ULTRA-POD
	AMP	520963-2	14-18 GA, 1/4" ULTRA-POD
G	XX	XX	BUTT SPlice 10-12 GA. TO 14-16 GA.

CIR	GA	COLOR	DESCRIPTION
17	16	BROWN	CLEARANCE LIGHTING.
19	16	BLACK	FROM CONN. #9, INT. LGT.(F) JUMPER TO RELAY K8.
19A	16	ORANGE	RELAY JUMPER, INT. LIGHTS, K2, K8, AND K9.
19C	16	BLACK/WHITE	FROM CONN. #9, INT. LGT.(R) JUMPER TO RELAY K8.
20	16	WHITE/BLACK	COMPARTMENT LIGHT FEED. (12V+)
21A	16	BLACK	INTERIOR LIGHT FEED (+), FRONT.
21B	16	BLACK/WHITE	INTERIOR LIGHT FEED (+), REAR.
21F	16	BLACK	FROM RELAY K8, INT. LIGHT SIGNAL TO CONN. #14.
21R	16	BLACK/WHITE	FROM RELAY K8, INT. LIGHT SIGNAL TO CONN. #14.
27	16	WHITE/BLACK	DESTINATION SIGN. 12 V+ FEED.
29	16	DARK BLUE	REAR DOOR BUZZER (GND)
30	16	LIGHT BLUE	HATCH DR PUSH OUT SASH (GND SIGNAL TO BUZZER)
32	16	YELLOW	VANDALOCK (GND)
33	16	WHITE	BUZZER FEED (REAR & SIDE DOOR)
38	16	PURPLE/BLACK	STROBE LIGHT FEED
40	16	BROWN/WHITE	MARKER LIGHTS
55	16	YELLOW	FLASHER TO PILOT LAMP, RIGHT-AMBER.
56	16	RED	FLASHER TO PILOT LAMP, RIGHT-RED.
57	16	RED	FLASHER TO PILOT LAMP, LEFT-RED.
58	16	YELLOW	FLASHER TO PILOT LAMP, LEFT-AMBER.
59	16	RED/BLACK	DOOR SIGNAL (GND) TO WELDON, FROM DOOR RELAY.
59A	16	RED/WHITE	DOOR SIGNAL (GND.) STEPLIGHT, FROM DOOR RELAY.
68	16	BROWN	COLD IGN., CHASSIS TO BODY FEED.
70	14	WHITE/BLACK	SWITCH PANEL LIGHTS (+).
73A	14	RED	DASH FAN LOW SPEED FEED.
73B	14	ORANGE	DASH FAN HIGH SPEED FEED.
74	16	BLACK	STEPLIGHT FEED.
76	16	BLACK/YELLOW	DOOR LIGHT FEED.
80	12	GREEN	ACTIVATION SWITCH (AMBER) TO FLASHER.
81	16	BLUE	RED WARNING LIGHT ACTIVATION SIGNAL, GND.
82	12	BLUE	FEED FROM FLASHER TO STOP ARM SOL. (12V+)
82A	16	BLUE/WHITE	FEED TO CROSSING ARM SOLENOID. (12V+)
82B	16	BLUE	FEED TO CROSSING ARM DEACT. RELAY (12V+)
85	12	BLACK	REAR HEATER FEED, HIGH.
86	14	WHITE	REAR HEATER FEED, LOW.
91	12	GREEN	FRONT HEATER FEED, HIGH.
92	14	RED	FRONT HEATER FEED, LOW.
149	12	BLACK	FLASHER MASTER POWER FEED FROM RELAY K5.
149A	16	BLACK/WHITE	FLASHER MASTER POWER SIGNAL TO CONN. #26.
160	12	BLACK	LIGHT MONITOR FEED, RIGHT (RED).
162	12	ORANGE	LIGHT MONITOR FEED, LEFT (RED).
164	12	BLUE	LIGHT MONITOR FEED, RIGHT (AMBER).
166	12	RED	LIGHT MONITOR FEED, LEFT (AMBER).
168	14	BROWN	LIGHT MONITOR FEED, TAIL LIGHTS.
169A	14	BROWN/WHITE	RELAY K1 TO DIMMER SW. CONN. #14, PARK SIGNAL.
169	16	BROWN	PARK LIGHT CIRCUIT FROM CONN. #13, CHASSIS FEED.
170	14	BLUE/WHITE	LIGHT MONITOR FEED, REVERSE LIGHTS.
172	14	RED	LIGHT MONITOR FEED, BRAKE LIGHTS.
172A	16	RED	FEED TO BRAKE RELAY (12V+ WHEN BRAKE DEPRESSED)
174	16	YELLOW	LIGHT MONITOR FEED, LEFT TURN SIGNAL.
175	16	DARK GREEN	LIGHT MONITOR FEED, RIGHT TURN SIGNAL.
458	10	ORANGE	TO STARTER SOLENOID.
459	10	ORANGE/BLACK	TO IGN. SWITCH SIDE OF START CIRCUIT.
468	14	ORANGE	HEATED MIRROR FEED (+), QUADS.
469	14	BLUE	HEATED MIRROR FEED (+), CAB.
470	14	ORANGE	STOP/CROSSING ARM HEATER POWER FEED.
504	16	RED	DOOR SWITCH (LIFT) TO BUZZER, (-) SIGNAL.
559	16	WHITE	DOOR LATCH SWITCH TO LIFT RELAY K10, (-) SIGNAL.
523	16	LIGHT GREEN	GND SIGNAL: SASH, REAR DOOR, LIFT DOOR LATCH (-)
561	16	LIGHT GREEN	TRANSMISSION LOCK-OUT LOOP.
564	16	GREEN/WHITE	TRANSMISSION LOCK-OUT LOOP.
565	16	YELLOW	PARK BRAKE SIGNAL, FROM CHASSIS PARK BRAKE.

CIR	GA	COLOR	DESCRIPTION
B	16	RED	FUSE PANEL (IGN.) TO BUZZER.
D	14	RED	FUSE PANEL (IGN.) TO DIMMER SWITCH CONN. #14.
F	12	RED	FROM FUSE PANEL (IGN.), HTD. MIRRORS/X-ING ARM.
G	14	RED	FUSE PANEL (IGN.) TO DASH FAN SWITCH CONN. #8.
H	14	RED	FUSE PANEL (IGN.) TO INT. LIGHT SWITCH CONN. #9.
J	14	RED	FROM FUSE PANEL (IGN.) TO SWITCHES (ACCESSORY)
K	12	RED	FUSE PANEL TO WARNING LIGHT SWITCH CONN. #3.
L	12	RED	FUSE PANEL (IGN.) TO HEATER SWITCH.
R	14	RED	FUSE PANEL (IGN.) TO STROBE SWITCH CONN. #4.
X	14	RED	FUSE PANEL TO LIFT RELAY K8.
176	16	RED	FUSE PANEL (IGN.) TO LIGHT MONITOR POS. FEED.
BB	14	RED	FROM FUSE PANEL TO MARKER LIGHT CONN. #12.
CC	12	RED	FROM FUSE PANEL (BAT.) TO WELDON POWER RELAY.
EE	14	RED	FROM FUSE PANEL (BAT.) TO ELECTRIC DOOR MOTOR.
FF	14	RED	FROM FUSE PANEL (BAT.) TO INT. LIGHT SW./RELAY.
GG	14	RED	FROM FUSE PANEL (BAT.) TO BRAKE RELAY
HH	12	RED	FROM FUSE PANEL TO WARNING SWITCH CONN. #3.
JJ	16	RED	FROM FUSE PANEL (BAT), CELLULAR/ACC. FEED (+).
LL	12	RED	FROM FUSE PANEL (BAT.), TO HEATER RELAY, FRONT.
KK	12	RED	FROM FUSE PANEL (BAT.), TO HEATER RELAY, REAR.
SS	14	RED	FROM FUSE PANEL (BAT.) TO STOP/CROSSING ARM.
XX	14	RED	FROM FUSE PANEL (BAT.), TO LIFT RELAYS.
IGN	8	RED	FROM FUSE PANEL TO BODY SOLENOID (COLD STUD).
BAT	8	RED	FROM FUSE PANEL TO BODY SOLENOID (HOT STUD).
SS1	14	RED	FEED FROM CIRCUIT 55, POWER FOR STOP/X-ING ARM.
TT	16	YELLOW	FEED FROM ELECTROMAGNET (+) TO 12 VOLT IGN.

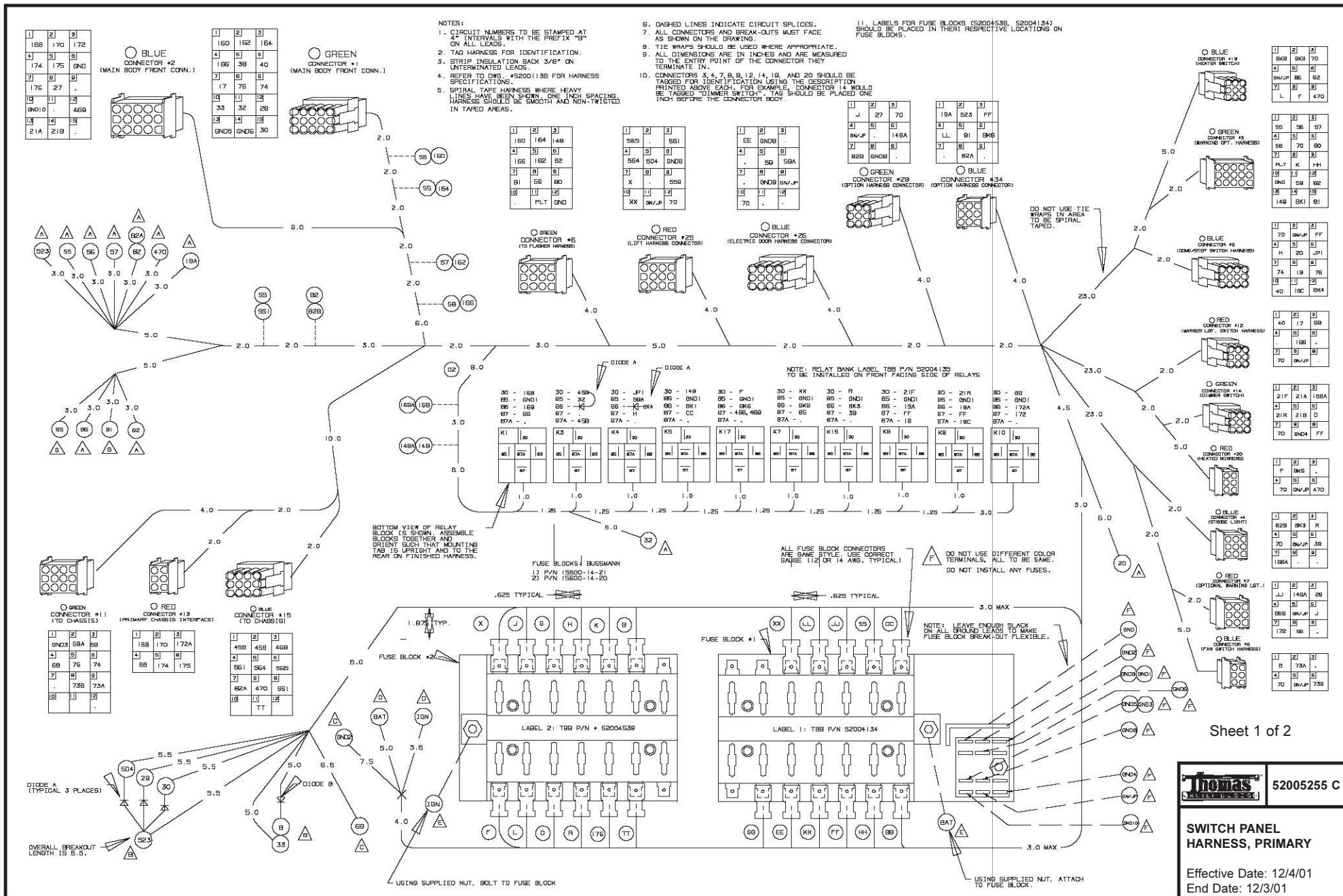
CIR	GA	COLOR	DESCRIPTION
GNVJP	14	GREEN	SWITCH PANEL LIGHTS (-).
GND	12	WHITE	FLASHER/WARNING SWITCHES/LIGHT MONITOR GROUND.
GND1	16	WHITE	RELAY GROUND (MAIN HARNESS).
GND2	16	WHITE	GROUND FOR BODY POWER FEED RELAY.
GND3	14	WHITE	DASH FAN GROUND, CHASSIS HARNESS.
GND4	14	WHITE	DIMMER SWITCH GROUND.
GND5	16	WHITE	FRONT CLEARANCE, MARKER LIGHT GROUNDS
GND6	12	WHITE	FRONT WARNING LIGHT GROUNDS.
GND8	16	WHITE	RELAY GROUND (OPTION HARNESS).
GND9	14	LIGHT BLUE	SWITCH HARNESS GROUND, ELECTRIC DOOR.
GND10	14	WHITE	HEATED MIRROR GROUND, FRONT MAIN.
BK1	16	BLACK	TO FLASHER RELAY, MASTER POWER TRIGGER. (12V+)
BK3	16	BLACK	TO STROBE RELAY, TRIGGER (+).
BK4	16	BLACK	TO STEP/DOOR LIGHT RELAY, TRIGGER. (12V+)
BK5	16	BLACK	HEATED MIRROR RELAY, TRIGGER (+).
BK6	16	BLACK	FRONT HEATER TRIGGER (HIGH), RELAY K11.
BK8	16	BLACK	REAR HEATER TRIGGER (HIGH), RELAY K12.
PL1	16	RED	CURRENT SENSING PILOT LIGHT FEED TO CONN. #3.
JPI	14	BLACK/ORANGE	SWITCHED FEED FROM STEP/DOOR RELAY K4.

PAGE 2 OF 2



**SWITCH PANEL HARNESS, PRIMARY**

End Date: 12/3/01





CONN	VENDOR	PART #	DESCRIPTION
2, 3	AMP	770030-1	15 POSITION CONNECTOR, CAP
	AMP	xx	14-16 GA TERMINAL, PIN
	AMP	xx	10-12 TERMINAL, PIN
1	AMP	770023-1	15 POSITION CONNECTOR, PLUG
	AMP	xx	14-16 GA TERMINAL, RECEPT.
	AMP	xx	10-12 GA TERMINAL, RECEPT.
9, 15	AMP	770022-1	12 POSITION CONNECTOR, PLUG
	AMP	xx	14-16 GA TERMINAL, RECEPTICAL
	AMP	xx	10-12 TERMINAL, RECEPTICAL
6, 11	AMP	770029-1	12 POSITION CONNECTOR, CAP
	AMP	xx	14-16 GA TERMINAL, PIN
	AMP	xx	10-12 TERMINAL, PIN
8	AMP	770027-1	6 POSITION CONNECTOR, CAP
	AMP	xx	14-16 GA TERMINAL, PIN
	AMP	xx	10-12 TERMINAL, PIN
12, 14	AMP	770021-1	9 POSITION CONNECTOR, PLUG
	AMP	xx	14-16 GA TERMINAL, RECEPT.
	AMP	xx	10-12 GA TERMINAL, RECEPT.
4, 7	AMP	770028-1	9 POSITION CONNECTOR, CAP
	AMP	xx	14-16 GA TERMINAL, PIN
	AMP	xx	10-12 TERMINAL, PIN
DIODE A	.	.	1 AMP 400 VOLT.
DIODE B	.	.	6 AMP 400 VOLT.
RELAY BLOCKS	HELLA	87122	HOUSING-RELAY, 5 POSITION.
	XX	XX	TERMINAL-FEMALE, 1/4", 14-16 GA.
	XX	XX	TERMINAL-FEMALE, 1/4", 10-12 GA.
PART	VENDOR	VENDOR P/N	DESCRIPTION
BLOCK #1	BUSSMANN	15600-14-21	14 POSITION WITH GROUND BUS
BLOCK #2		15600-14-20	14 POSITION FUSE BLOCK

NOTES:

1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.
2. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
3. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.


PART	VENDOR	VENDOR P/N	DESCRIPTION
A	XX	XX	BUTT SPLICE, 14-16 AWG.
B	AMP	62109-1	RECEPTACLE AND TAB COMBINATION, 18-14 GA
C	XX	XX	RING TERMINAL, #10 STUD 14-16 AWG.
D	XX	XX	RING TERMINAL, 5/16", 8 AWG.
E	XX	XX	RING TERMINAL, #10 STUD, 8 AWG.
F	AMP	520974-2	10-14 GA, 1/4" ULTRA-POD
	AMP	520963-2	14-18 GA, 1/4" ULTRA-POD
G	XX	XX	BUTT SPLICE 10-12 GA. TO 14-16 GA.

CIR	GA	COLOR	DESCRIPTION
17	16	BROWN	CLEARANCE LIGHTING.
18	16	BLACK	FROM CONN. #9, INT. LGT.(F) JUMPER TO RELAY K8.
19A	16	ORANGE	RELAY JUMPER, INT. LIGHTS, K2, K8, AND K9.
19C	16	BLACK/WHITE	FROM CONN. #9, INT. LGT.(R) JUMPER TO RELAY K9.
20	16	WHITE/BLACK	COMPARTMENT LIGHT FEED. (12V+)
21A	16	BLACK	INTERIOR LIGHT FEED (+), FRONT.
21B	16	BLACK/WHITE	INTERIOR LIGHT FEED (+), REAR.
21F	16	BLACK	FROM RELAY K8, INT. LIGHT SIGNAL TO CONN. #14.
21R	16	BLACK/WHITE	FROM RELAY K8, INT. LIGHT SIGNAL TO CONN. #14.
27	16	WHITE/BLACK	DESTINATION SIGN. 12 V+ FEED.
29	16	DARK BLUE	REAR DOOR BUZZER (GND)
30	16	LIGHT BLUE	HATCH OR PUSH OUT SASH (GND SIGNAL TO BUZZER)
32	16	YELLOW	VANDALOCK (GND)
33	16	WHITE	BUZZER FEED (REAR & SIDE DOOR)
38	16	PURPLE/BLACK	STROBE LIGHT FEED
40	16	BROWN/WHITE	MARKER LIGHTS
55	16	YELLOW	FLASHER TO PILOT LAMP, RIGHT-AMBER.
56	16	RED	FLASHER TO PILOT LAMP, RIGHT-RED.
57	16	RED	FLASHER TO PILOT LAMP, LEFT-RED.
58	16	YELLOW	FLASHER TO PILOT LAMP, LEFT-AMBER.
59	16	RED/BLACK	DOOR SIGNAL (GND) TO WELDON, FROM DOOR RELAY.
59A	16	RED/WHITE	DOOR SIGNAL (GND.) STEPLIGHT, FROM DOOR RELAY.
68	16	BROWN	COLD IGN., CHASSIS TO BODY FEED.
70	14	WHITE/BLACK	SWITCH PANEL LIGHTS (+).
73A	14	RED	DASH FAN LOW SPEED FEED.
73B	14	ORANGE	DASH FAN HIGH SPEED FEED.
74	16	BLACK	STEPLIGHT FEED.
76	16	BLACK/YELLOW	DOOR LIGHT FEED.
80	12	GREEN	ACTIVATION SWITCH (AMBER) TO FLASHER.
81	16	BLUE	RED WARNING LIGHT ACTIVATION SIGNAL, GND.
82	12	BLUE	FEED FROM FLASHER TO STOP ARM SOL. (12V+)
82A	16	BLUE/WHITE	FEED TO CROSSING ARM SOLENOID. (12V+)
82B	16	BLUE	FEED TO CROSSING ARM DEACT. RELAY (12V+)
85	12	BLACK	REAR HEATER FEED, HIGH.
86	14	WHITE	REAR HEATER FEED, LOW.
91	12	GREEN	FRONT HEATER FEED, HIGH.
92	14	RED	FRONT HEATER FEED, LOW.
149	12	BLACK	FLASHER MASTER POWER FEED FROM RELAY K5.
149A	16	BLACK/WHITE	FLASHER MASTER POWER SIGNAL TO CONN. #26.
160	12	BLACK	LIGHT MONITOR FEED, RIGHT (RED).
162	12	ORANGE	LIGHT MONITOR FEED, LEFT (RED).
164	12	BLUE	LIGHT MONITOR FEED, RIGHT (AMBER).
166	12	RED	LIGHT MONITOR FEED, LEFT (AMBER).
168	14	BROWN	LIGHT MONITOR FEED, TAIL LIGHTS.
169A	14	BROWN/WHITE	RELAY K1 TO DIMMER SW. CONN. #14, PARK SIGNAL.
169	16	BROWN	PARK LIGHT CIRCUIT FROM CONN. #13, CHASSIS FEED.
170	14	BLUE/WHITE	LIGHT MONITOR FEED, REVERSE LIGHTS.
172	14	RED	LIGHT MONITOR FEED, BRAKE LIGHTS.
172A	16	RED	FEED TO BRAKE RELAY (12V+ WHEN BRAKE DEPRESSED)
174	16	YELLOW	LIGHT MONITOR FEED, LEFT TURN SIGNAL.
175	16	DARK GREEN	LIGHT MONITOR FEED, RIGHT TURN SIGNAL.
458	10	ORANGE	TO STARTER SOLENOID.
459	10	ORANGE/BLACK	TO IGN. SWITCH SIDE OF START CIRCUIT.
468	14	ORANGE	HEATED MIRROR FEED (+), QUADS.
469	14	BLUE	HEATED MIRROR FEED (+), CAB.
470	14	ORANGE	STOP/CROSSING ARM HEATER POWER FEED.
504	16	RED	DOOR SWITCH (LIFT) TO BUZZER, (-) SIGNAL.
558	16	WHITE	DOOR LATCH SWITCH TO LIFT RELAY K10, (-) SIGNAL.
523	16	LIGHT GREEN	GND SIGNAL: SASH, REAR DOOR, LIFT DOOR LATCH (-)
561	16	LIGHT GREEN	TRANSMISSION LOCK-OUT LOOP.
564	16	GREEN/WHITE	TRANSMISSION LOCK-OUT LOOP.
565	16	YELLOW	PARK BRAKE SIGNAL, FROM CHASSIS PARK BRAKE.

CIR	GA	COLOR	DESCRIPTION
B	16	RED	FUSE PANEL (IGN.) TO BUZZER.
D	14	RED	FUSE PANEL (IGN.) TO DIMMER SWITCH CONN. #14.
F	12	RED	FROM FUSE PANEL (IGN.), HTD. MIRRORS/X-ING ARM.
G	14	RED	FUSE PANEL (IGN.) TO DASH FAN SWITCH CONN. #8.
H	14	RED	FUSE PANEL (IGN.) TO INT. LIGHT SWITCH CONN. #9.
J	14	RED	FROM FUSE PANEL (IGN.) TO SWITCHES (ACCESSORY).
K	12	RED	FUSE PANEL TO WARNING LIGHT SWITCH CONN. #3.
L	12	RED	FUSE PANEL (IGN.) TO HEATER SWITCH.
R	14	RED	FUSE PANEL (IGN.) TO STROBE SWITCH CONN. #4.
X	14	RED	FUSE PANEL TO LIFT RELAY K8.
176	16	RED	FUSE PANEL (IGN.) TO LIGHT MONITOR POS. FEED.
BB	14	RED	FROM FUSE PANEL TO MARKER LIGHT CONN. #12.
CC	12	RED	FROM FUSE PANEL (BAT.) TO WELDON POWER RELAY.
EE	14	RED	FROM FUSE PANEL (BAT.) TO ELECTRIC DOOR MOTOR.
FF	14	RED	FROM FUSE PANEL (BAT.) TO INT. LIGHT SW./RELAY
GG	14	RED	FROM FUSE PANEL (BAT.) TO BRAKE RELAY
HH	12	RED	FROM FUSE PANEL TO WARNING SWITCH CONN. #3.
JJ	16	RED	FROM FUSE PANEL (BAT.), CELLULAR/ACC. FEED (+).
LL	12	RED	FROM FUSE PANEL (BAT.), TO HEATER RELAY, FRONT.
KK	12	RED	FROM FUSE PANEL (BAT.), TO HEATER RELAY, REAR.
SS	14	RED	FROM FUSE PANEL (BAT.) TO STOP/CROSSING ARM.
XX	14	RED	FROM FUSE PANEL (BAT.), TO LIFT RELAYS.
IGN	8	RED	FROM FUSE PANEL TO BODY SOLENOID (COLD STUD).
BAT	8	RED	FROM FUSE PANEL TO BODY SOLENOID (HOT STUD).
SSI	14	RED	FEED FROM CIRCUIT SS, POWER FOR STOP/X-ING ARM.
TT	16	YELLOW	FEED FROM ELECTROMAGNET (+) TO 12 VOLT IGN.

CIR	GA	COLOR	DESCRIPTION
BW/P	14	GREEN	SWITCH PANEL LIGHTS (-).
GND	12	WHITE	FLASHER/WARNING SWITCHES/LIGHT MONITOR GROUND.
GND1	16	WHITE	RELAY GROUND (MAIN HARNESS).
GND2	16	WHITE	GROUND FOR BODY POWER FEED RELAY.
GND3	14	WHITE	DASH FAN GROUND, CHASSIS HARNESS.
GND4	14	WHITE	DIMMER SWITCH GROUND.
GND5	16	WHITE	FRONT CLEARANCE, MARKER LIGHT GROUNDS
GND6	12	WHITE	FRONT WARNING LIGHT GROUNDS.
GND8	16	WHITE	RELAY GROUND (OPTION HARNESS).
GND9	14	LIGHT BLUE	SWITCH HARNESS GROUND, ELECTRIC DOOR.
GND10	14	WHITE	HEATED MIRROR GROUND, FRONT MAIN.
BK1	16	BLACK	TO FLASHER RELAY, MASTER POWER TRIGGER. (12V+)
BK3	16	BLACK	TO STROBE RELAY, TRIGGER (+).
BK4	16	BLACK	TO STEP/DOOR LIGHT RELAY, TRIGGER. (12V+)
BK6	16	BLACK	HEATED MIRROR RELAY, TRIGGER (+).
BK8	16	BLACK	FRONT HEATER TRIGGER (HIGH), RELAY K11.
BK9	16	BLACK	REAR HEATER TRIGGER (HIGH), RELAY K12.
PLT	16	RED	CURRENT SENSING PILOT LIGHT FEED TO CONN. #3.
JPI	14	BLACK/ORANGE	SWITCHED FEED FROM STEP/DOOR RELAY K4.

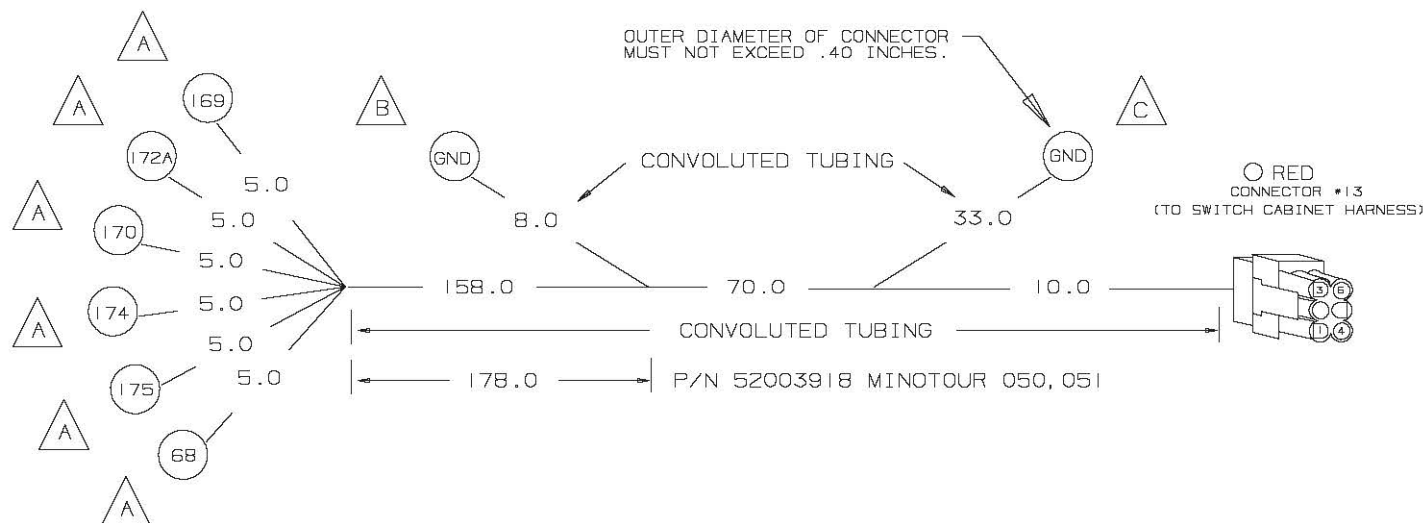
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**52005255 C**

**SWITCH PANEL HARNESS, PRIMARY**  
 Effective Date: 12/4/01  
 End Date: 12/3/01

CONN	VENDOR	PART #	DESCRIPTION	QTY
13	AMP	770020-1	6 POSITION CONNECTOR, PLUG	1
	AMP	XX	14-16 GA TERMINAL, RECP.	X
	AMP	XX	10-12 GA TERMINAL, RECP.	X

LEAD #	AWG	COLOR	DESCRIPTION
169	16	BROWN/WHITE	PARKING LIGHT CIRCUIT.
170	14	BLACK/GREEN	LIGHT MONITOR FEED, REVERSE LIGHTS.
172A	16	DARK BLUE	BRAKE LIGHT RELAY FEED.
174	14	YELLOW	LIGHT MONITOR FEED, LEFT TURN SIGNAL.
175	14	DARK GREEN	LIGHT MONITOR FEED, RIGHT TURN SIGNAL.
GND	6	WHITE	CHASSIS TO BODY ELECTRICAL GROUND.
68	16	ORANGE	COLD IGN., CHASSIS TO BODY FEED.



1	2	3
169	170	172A
4	5	6
68	174	175

- OUTSIDE DIAMETER OF RING STYLE CONNECTORS MUST BE AS SMALL AS POSSIBLE TO ALLOW GIVEN STUD SIZE.
- USE BLACK SLIT POLYAMIDE OR NYLON HEAT RESISTANT CONDUIT WITH A MINIMUM OF 120 DEGREES CONTRIGRADE CONTINUOUS OPERATING TEMPERATURE WHERE INDICATED. SECURELY TAPE CONDUIT TO HARNESS ON ENDS.
- WHERE "XX" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEEDED FOR TERMINATION.
- WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
- REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
- STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
- TAG HARNESS FOR IDENTIFICATION.
- CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.

NOTES:

C	XX	XX	RING TERMINAL, #10 STUD, 6 AWG.	X
B	XX	XX	RING TERMINAL, 7/16" STUD, 6 AWG.	X
A	DEUTSCH	0460-215-16141	JIFFY SPLICE, 14-16 AWG.	X
TERM	VENDOR	VENDOR NO.	DESCRIPTION	QTY.

## PRIMARY CHASSIS INTERFACE FORD MODEL SRW, DRW

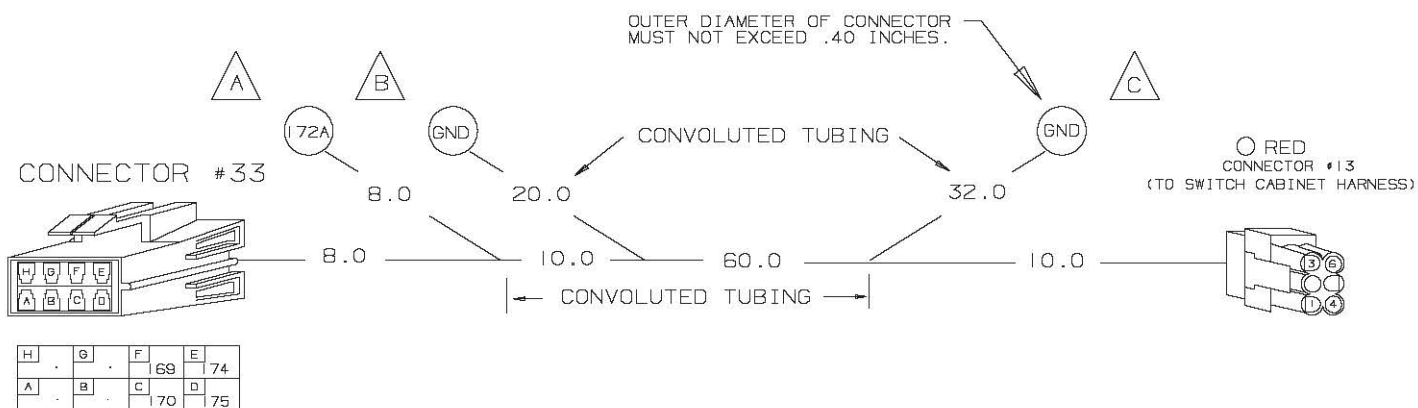
<b>Thomas</b> SOLUTIONS	52003908 C
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**HARNESS, PRIMARY  
CHASSIS INTERFACE,  
FORD**

End Date: 9/4/02

CONN	VENDOR	PART #	DESCRIPTION	QTY
33	PED	1206499B	CONN. 6F, METRI PACK 280 SERIES	1
	PED	XX	TERMINALS FOR CONNECTOR	X
	PED	XX	SECONDARY LOCK TAB FOR CONNECTOR	X
13	AMP	770020-1	6 POSITION CONNECTOR, PLUG	1
	AMP	XX	14-16 GA TERMINAL, RECEPT.	X
	AMP	XX	10-12 GA TERMINAL, RECEPT.	X

LEAD #	AWG	COLOR	DESCRIPTION
169	16	BROWN	PARKING LIGHT CIRCUIT.
170	14	BLUE/WHITE	LIGHT MONITOR FEED, REVERSE LIGHTS.
172A	16	WHITE	BRAKE LIGHT RELAY FEED.
174	16	YELLOW	LIGHT MONITOR FEED, LEFT TURN SIGNAL.
175	16	DARK GREEN	LIGHT MONITOR FEED, RIGHT TURN SIGNAL.
GND	6	WHITE	CHASSIS TO BODY ELECTRICAL GROUND.



1	2	3
169	170	172A
4	5	6
	174	175

1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.
2. TAG HARNESS FOR IDENTIFICATION.
3. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
5. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
6. WHERE "X" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEEDED FOR TERMINATION.
7. USE BLACK SLIT POLYAMIDE OR NYLON HEAT RESISTANT CONDUIT WITH A MINIMUM OF 120 DEGREES CONTRIGRADE CONTINUOUS OPERATING TEMPERATURE WHERE INDICATED. SECURELY TAPE CONDUIT TO HARNESS ON ENDS.
8. OUTSIDE DIAMETER OF RING STYLE CONNECTORS MUST BE AS SMALL AS POSSIBLE TO ALLOW GIVEN STUD SIZE.

NOTES:

C	RING TERMINAL, #10 STUD, 6 AWG.	X
B	RING TERMINAL, 1/2" STUD, 6 AWG.	X
A	BUTT SPLICE, 14-16 AWG.	X
TERM	DESCRIPTION	QTY.

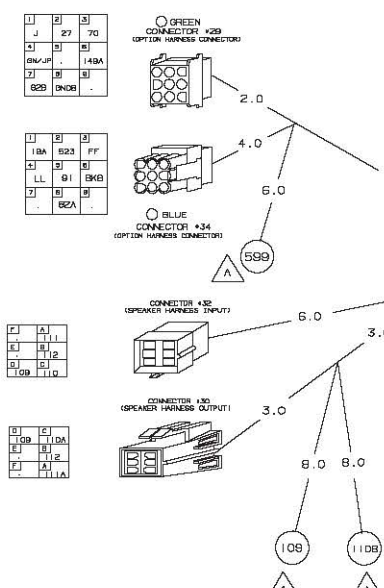
PRIMARY CHASSIS INTERFACE  
GM MODEL MINOTOUR

<b>Thomas</b> SOLUTIONS	52003805 C
HARNESS, PRIMARY CHASSIS INTERFACE, GM	
End Date: 9/5/02	

CONN	VENDOR	PART #	DESCRIPTION
24, 29	AMP	77002B-1	8 POSITION CONNECTOR, CAP
	AMP	XX	14-16 GA. TERMINAL, PIN
	AMP	XX	10-12 TERMINAL, PIN
21	AMP	77002B-1	4 POSITION CONNECTOR, CAP
	AMP	XX	14-16 GA. TERMINAL, PIN
	AMP	XX	10-12 TERMINAL, PIN
33	AMP	77001B-1	4 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA. TERMINAL, SOCKET
	AMP	XX	10-12 GA. TERMINAL, SOCKET
34	AMP	770021-1	8 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA. TERMINAL, SOCKET
	AMP	XX	10-12 GA. TERMINAL, SOCKET
5	AMP	770020-1	6 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA. TERMINAL, SOCKET
	AMP	XX	10-12 GA. TERMINAL, SOCKET
30	RED	12064752	CONN. BP. METRE PACK 290 SERIES
	RED	XX	TERMINALS FOR CONNECTOR
	RED	XX	SECONDARY LOCK TAB FOR CONNECTOR
32	RED	12064754	CONN. BK. METRE PACK 290 SERIES
	RED	XX	TERMINALS FOR CONNECTOR
	RED	XX	SECONDARY LOCK TAB FOR CONNECTOR
DIODE A	-	-	1 AMP 400 VOLT.
	-	-	-
	-	-	-
RELAY BLOCKS	HELLA	87122	HOUSING-RELAY, 8 POSITION.
	INTERLOCK	XX	TERMINAL-FEMALE, 1/4", 14-16 GA.
	INTERLOCK	XX	TERMINAL-FEMALE, 1/4", 10-12 GA.

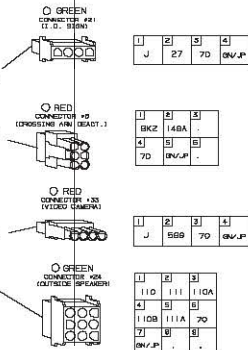
NOTE: BOTTOM VIEW OF RELAY BLOCK IS SHOWN. RELAY BLOCKS SHOULD BE ASSEMBLED TOGETHER AND ORIENTED SUCH THAT MOUNTING TAB IS UPRIGHT AND TO THE REAR ON FINISHED HARNESS.

DIODE A



- NOTES:
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.
  2. TAG HARNESS FOR IDENTIFICATION.
  3. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
  4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
  5. FULLY TAPE HARNESS WHERE HEAVY LINES HAVE BEEN SHOWN. IN TAPED AREAS, THE HARNESS MUST BE SMOOTH AND NON-TWISTED.
  6. USE WIRE TIES TO HOLD HARNESS WHERE NEEDED, MINIMUM AMOUNT AND SIZE.
  7. CONNECTORS AND BREAK-OUTS MUST FACE AS INDICATED ON THE DRAWING.
  8. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
  9. CONNECTORS 21, 5, 33, AND 24 ARE TO BE TAGGED APPROPRIATELY 1 INCH FROM CONNECTOR BODY. EXAMPLE: CONN. #21 TAG WOULD READ "I.D. SIGN"

CIR	BA	COLOR	DESCRIPTION
J	14	RED	FROM FUSE PANEL (ACC.)
FF	16	RED	FROM FUSE PANEL (BAT) TO INT. LIGHT RELAY.
LL	12	RED	FROM FUSE PNL. (BAT) TO HEATER RELAY.
19A	16	ORANGE	HOME OPTION RELAY TRIGGER (+).
27	16	BLACK/WHITE	I.D. SIGN. FEED FROM SWITCH.
70	16	WHITE/BLACK	SWITCH PANEL LIGHTS (+) FEED.
82A	16	BLUE	FEED TO CROSSING ARM (+).
82B	16	BLUE/WHITE	FEED TO CROSSING ARM DEACTIVATION RELAY.
91	12	GREEN	FRONT HEATER FEED, HIGH (+).
109	16	PURPLE/BLACK	SPEAKER FEED, RIGHT (-).
110	16	PURPLE	SPEAKER FEED, RIGHT (+).
110A	16	PURPLE	RIGHT SPEAKER FEED, (+).
110B	16	GREEN	EXTERNAL SPEAKER FEED, (+).
111	16	WHITE	SPEAKER FEED, LEFT (+).
111A	16	WHITE	LEFT SPEAKER FEED, (+).
112	16	WHITE/BLACK	SPEAKER FEED, LEFT (-).
149A	16	GREEN	TO ELECTRIC DOOR HARNESS, OPEN.
523	16	LIGHT GREEN	GND SIGNAL: SASH, LIFT LATCH, REAR DOOR, HATCH.
599	14	RED/WHITE	VIDEO CAMERA POWER SUPPLY FEED (+).
BK2	16	BLACK	TO CROSSING ARM RELAY, TRIGGER FROM SWITCH. (+)
BK9	16	BLACK	FROM MAIN, FRONT HEATER RELAY TRIGGER, HIGH. (+)
GND9	16	WHITE	RELAY GROUND (OPTION HARNESS).
8V/J	16	GREEN	SWITCH PANEL LIGHTS (-).



PART	VENDOR	VENDOR P/N	DESCRIPTION
A	XX	XX	BUTT SPLICE, 14-16 GA., INSULATED

52004124 C

**HARNESS, OPTION INTERFACE**

End Date: 3/11/01



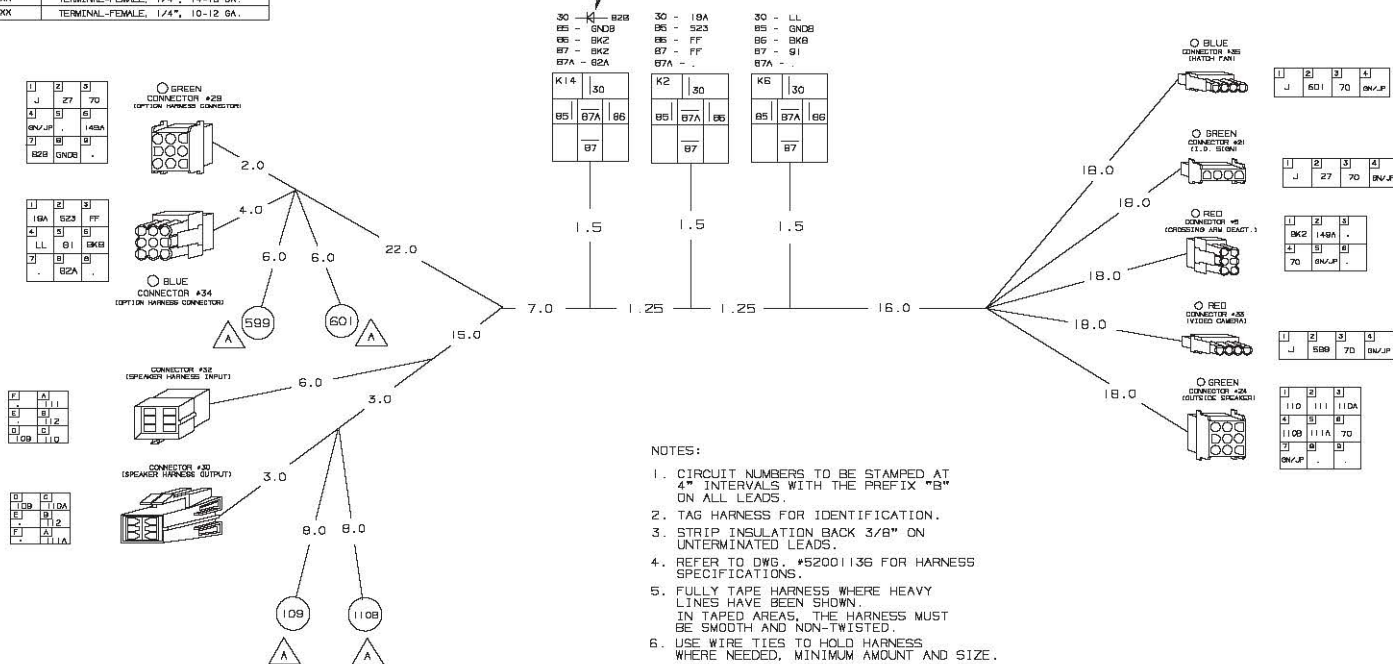
CONN	VENDOR	PART #	DESCRIPTION
24, 26	AMP	770029-I	8 POSITION CONNECTOR, CAP
	AMP	XX	14-16 GA TERMINAL, PIN
	AMP	XX	10-12 TERMINAL, PIN
21	AMP	770026-I	4 POSITION CONNECTOR, CAP
	AMP	XX	14-16 GA TERMINAL, PIN
	AMP	XX	10-12 TERMINAL, PIN
33, 35	AMP	770019-I	4 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA TERMINAL, SOCKET
	AMP	XX	10-12 GA TERMINAL, SOCKET
34	AMP	770021-I	8 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA TERMINAL, SOCKET
	AMP	XX	10-12 GA TERMINAL, SOCKET
5	AMP	770020-I	6 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA TERMINAL, SOCKET
	AMP	XX	10-12 GA TERMINAL, SOCKET
30	PEC	12064752	CONN. OF, METRI PACK 200 SERIES
	PEC	XX	TERMINALS FOR CONNECTOR
	PEC	XX	SECONDARY LOCK TAB FOR CONNECTOR
32	PEC	12064759	CONN. GA, METRI PACK 200 SERIES
	PEC	XX	TERMINALS FOR CONNECTOR
	PEC	XX	SECONDARY LOCK TAB FOR CONNECTOR
DIODE A	.	.	.
	.	.	1 AMP 400 VOLT.
	.	.	.
RELAY BLOCKS	HELLA	87122	HOUSING-RELAY, 5 POSITION.
	INTERLOCK	XX	TERMINAL-FEMALE, 1/4", 14-16 GA.
	INTERLOCK	XX	TERMINAL-FEMALE, 1/4", 10-12 GA.

CIR	GA	COLOR	DESCRIPTION
J	14	RED	FROM FUSE PANEL (ACC.)
FF	16	RED	FROM FUSE PANEL (BAT) TO INT. LIGHT RELAY.
LL	12	RED	FROM FUSE PNL. (BAT) TO HEATER RELAY.
19A	16	ORANGE	DOME OPTION RELAY TRIGGER (+).
27	16	BLACK/WHITE	I.D. SIGN, FEED FROM SWITCH.
70	16	WHITE/BLACK	SWITCH PANEL LIGHTS (+) FEED.
82A	16	BLUE	FEED TO CROSSING ARM (+).
82B	16	BLUE/WHITE	FEED TO CROSSING ARM DEACTIVATION RELAY.
91	12	GREEN	FRONT HEATER FEED, HIGH (+).
109	16	PURPLE/BLACK	SPEAKER FEED, RIGHT (-).
110	16	PURPLE	SPEAKER FEED, RIGHT (+).
110A	16	PURPLE	RIGHT SPEAKER FEED, (+).

CIR	GA	COLOR	DESCRIPTION
110B	16	GREEN	EXTERNAL SPEAKER FEED, (+) .
111	16	WHITE	SPEAKER FEED, LEFT (+) .
111A	16	WHITE	LEFT SPEAKER FEED, (+) .
112	16	WHITE/BLACK	SPEAKER FEED, LEFT (-) .
149A	16	GREEN	TO ELECTRIC DOOR HARNESS, OPEN.
523	16	LIGHT GREEN	GND SIGNAL: SASA, LIFT LATCH, REAR DOOR, HATCH.
589	14	RED/WHITE	VIDEO CAMERA POWER SUPPLY FEED (+) .
601	16	BLUE	ESCAPE HATCH FAN FEED (+) .
BK2	16	BLACK	TO CROSSING ARM RELAY, TRIGGER FROM SWITCH. (+)
BKB	16	BLACK	FROM MAIN, FRONT HEATER RELAY TRIGGER, HIGH. (+)
GND8	16	WHITE	RELAY GROUND (OPTION HARNESS) .
SWP3	16	GREEN	SWITCH PANEL LIGHTS (-) .

NOTE: BOTTOM VIEW OF RELAY BLOCK IS SHOWN. RELAY BLOCKS SHOULD BE ASSEMBLED TOGETHER AND ORIENTED SUCH THAT MOUNTING TAB IS UPRIGHT AND TO THE REAR ON FINISHED HARNESS.

DIODE A  
HEAT SHRINK BODY AND LEADS.



1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.
2. TAG HARNESS FOR IDENTIFICATION.
3. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
5. FULLY TAPE HARNESS WHERE HEAVY LINES HAVE BEEN SHOWN IN TAPED AREAS. THE HARNESS MUST BE SMOOTH AND NON-TWISTED.
6. USE WIRE TIES TO HOLD HARNESS WHERE NEEDED. MINIMUM AMOUNT AND SIZE.
7. CONNECTORS AND BREAK-OUTS MUST FACE AS INDICATED ON DRAWING.
8. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
9. CONNECTORS 21, 5, 33, 35, AND 24 ARE TO BE TAGGED APPROPRIATELY 1 INCH FROM CONNECTOR BODY. EXAMPLE: CONN. #21 TAG WOULD READ "I.D. SIGN"
10. AT ANY POINT REQUIRING A SPLICE, USE ULTRASONIC SEALING WITH SEALING GEL SHRINK.
11. ALL WIRE LENGTHS ARE IN INCHES, AND ARE BASED ON DIMS BETWEEN WIRE "BREAK-OUTS" AND/OR "BREAK-OUTS" AND ENTRY POINT OF THE CONNECTOR THEY TERMINATE IN.

PART	VENDOR	VENDOR P/N	DESCRIPTION
A	XX	XX	BUTT SPLICE, 14-16 GA., INSULATED

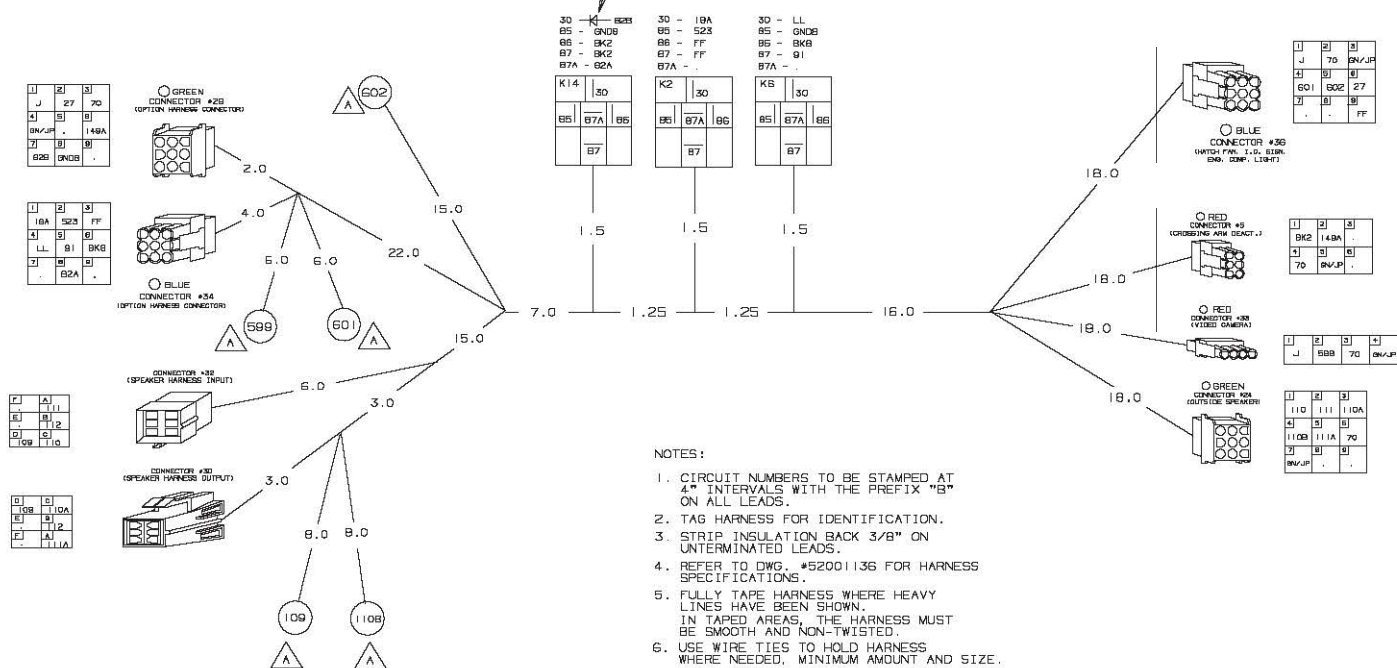
CONN	VENDOR	PART #	DESCRIPTION
24, 28	AMP	77002B-1	9 POSITION CONNECTOR, CAP
	AMP	XX	14-16 GA TERMINAL, PIN
	AMP	XX	10-12 TERMINAL, PIN
33	AMP	770019-1	4 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA TERMINAL, SOCKET
	AMP	XX	10-12 GA TERMINAL, SOCKET
34, 36	AMP	770021-1	8 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA TERMINAL, SOCKET
	AMP	XX	10-12 GA TERMINAL, SOCKET
5	AMP	770020-1	6 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA TERMINAL, SOCKET
	AMP	XX	10-12 GA TERMINAL, SOCKET
30	PED	12064752	CONN. OF. METRI PACK 280 SERIES
	PED	XX	TERMINALS FOR CONNECTOR
	PED	XX	SECONDARY LOCK TAB FOR CONNECTOR
32	PED	12064754	CONN. OF. METRI PACK 280 SERIES
	PED	XX	TERMINALS FOR CONNECTOR
	PED	XX	SECONDARY LOCK TAB FOR CONNECTOR
DIODE	A	-	-
	A	-	1 AMP 450 VOLT.
RELAY BLOCKS	HELLA	87132	HOUSING-RELAY, 9 POSITION
	INTERLOCK	XX	TERMINAL-FEMALE, 1/4", 14-16 GA.
	INTERLOCK	XX	TERMINAL-FEMALE, 1/4", 10-12 GA.

CIR	GA	COLOR	DESCRIPTION
J	14	RED	FROM FUSE PANEL (ACC.)
FF	16	RED	FROM FUSE PANEL (BAT) TO INT. LIGHT RELAY.
LL	12	RED	FROM FUSE PNL. (BAT) TO HEATER RELAY.
19A	16	ORANGE	DOME OPTION RELAY TRIGGER (+).
27	16	BLACK/WHITE	I.D. SIGN. FEED FROM SWITCH.
70	16	WHITE/BLACK	SWITCH PANEL LIGHTS (+) FEED.
B2A	16	BLUE	FEED TO CROSSING ARM (+).
B2B	16	BLUE/WHITE	FEED TO CROSSING ARM DEACTIVATION RELAY.
91	12	GREEN	FRONT HEATER FEED, HIGH (+).
109	16	PURPLE/BLACK	SPEAKER FEED, RIGHT (-).
110	16	PURPLE	SPEAKER FEED, RIGHT (+).
110A	16	PURPLE	RIGHT SPEAKER FEED, (+).

CIR	GA	COLOR	DESCRIPTION
110B	16	GREEN	EXTERNAL SPEAKER FEED, (+).
111	16	WHITE	SPEAKER FEED, LEFT (+).
111A	16	WHITE	LEFT SPEAKER FEED, (+).
112	16	WHITE/BLACK	SPEAKER FEED, LEFT (-).
149A	16	GREEN	TO ELECTRIC DOOR HARNESS, OPEN.
523	16	LIGHT GREEN	GND SIGNAL: SASH, LIFT LATCH, REAR DOOR, HATCH.
599	14	RED/WHITE	VIDEO CAMERA POWER SUPPLY FEED (+).
601	16	BLUE	ESCAPE HATCH FAN FEED (+).
602	16	BLACK	ENG. COMP. LIGHT FEED (+).
BK2	16	BLACK	TO CROSSING ARM RELAY, TRIGGER FROM SWITCH. (+)
BK8	16	BLACK	FROM MAIN, FRONT HEATER RELAY TRIGGER, HIGH. (+)
GNDB	16	WHITE	RELAY GROUND (OPTION HARNESS).
GNVP	16	GREEN	SWITCH PANEL LIGHTS (-).

NOTE:  
BOTTOM VIEW OF RELAY BLOCK IS SHOWN. RELAY BLOCKS SHOULD BE ASSEMBLED TOGETHER AND ORIENTED SUCH THAT MOUNTING TAB IS UPRIGHT AND TO THE REAR ON FINISHED HARNESS.

DIODE A HEAT SHRINK BODY AND LEADS.



#### NOTES:

1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.
2. TAG HARNESS FOR IDENTIFICATION.
3. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
5. FULLY TAPE HARNESS WHERE HEAVY LINES HAVE BEEN SHOWN. IN TAPED AREAS, THE HARNESS MUST BE SMOOTH AND NON-TWISTED.
6. USE WIRE TIES TO HOLD HARNESS WHERE NEEDED, MINIMUM AMOUNT AND SIZE.
7. CONNECTORS AND BREAK-OUTS MUST FACE AS INDICATED ON THE DRAWING.
8. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
9. CONNECTORS 35, 5, 33, AND 24 ARE TO BE TAGGED APPROPRIATELY 1 INCH FROM CONNECTOR BODY. EXAMPLE: CONN. #21 TAG WOULD READ "I.D. SIGN"
10. AT ANY POINT REQUIRING A SPLICE, USE ULTRASONIC SPLICING WITH SEALING HEAT SHRINK.
11. ALL WIRE LENGTHS ARE IN INCHES AND ARE BASED ON DIMS BETWEEN WIRE "BREAK-OUTS" AND/OR "BREAK-OUTS" AND ENTRY POINT OF THE CONNECTOR THEY TERMINATE IN.

PART	VENDOR	VENDOR P/N	DESCRIPTION
A	XX	XX	BUTT SPLICE, 14-16 GA., INSULATED



**HARNESS, OPTION INTERFACE**

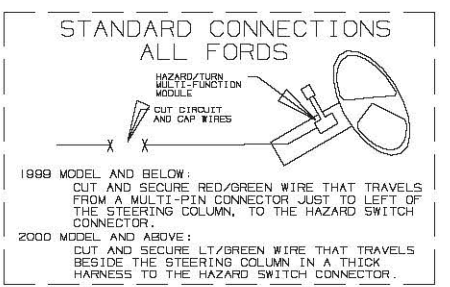
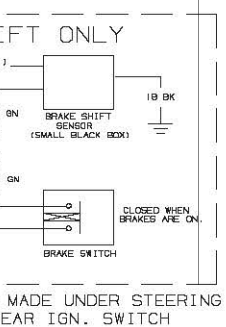
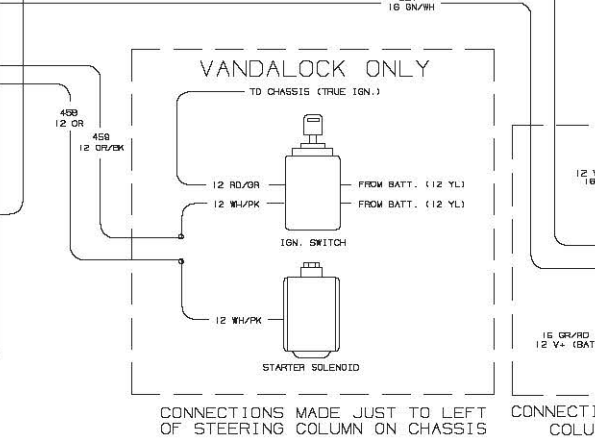
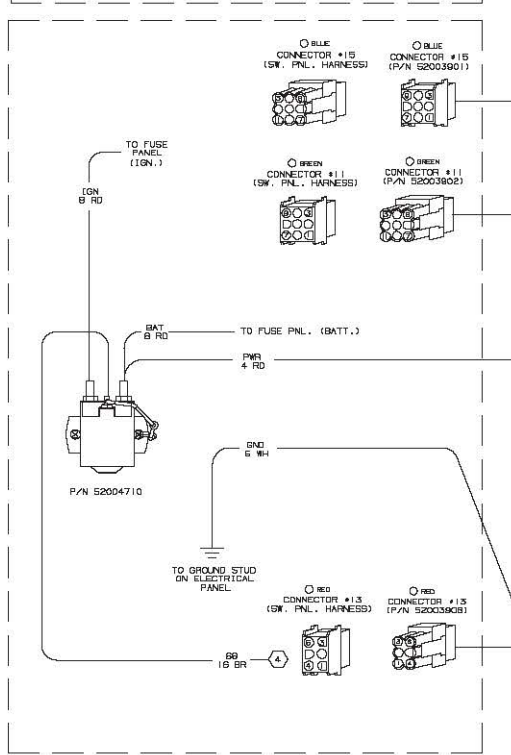
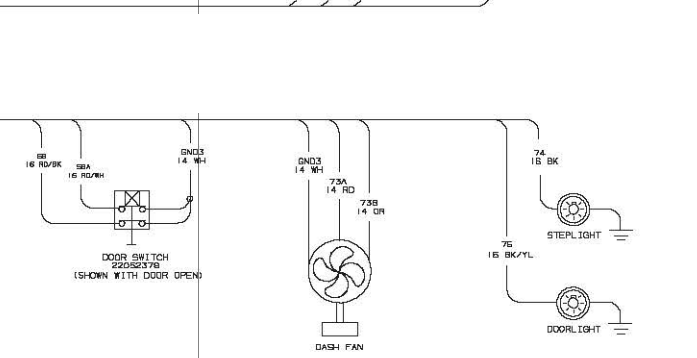
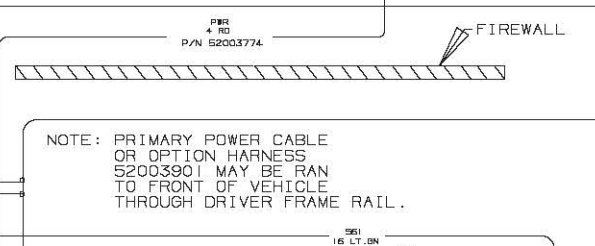
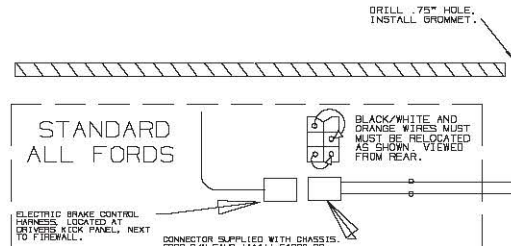
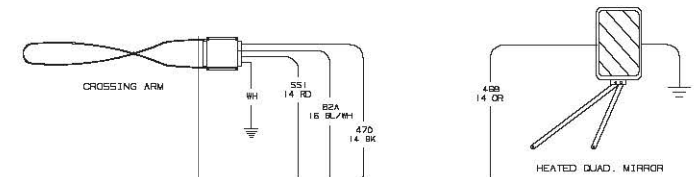
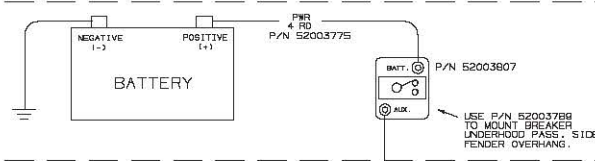
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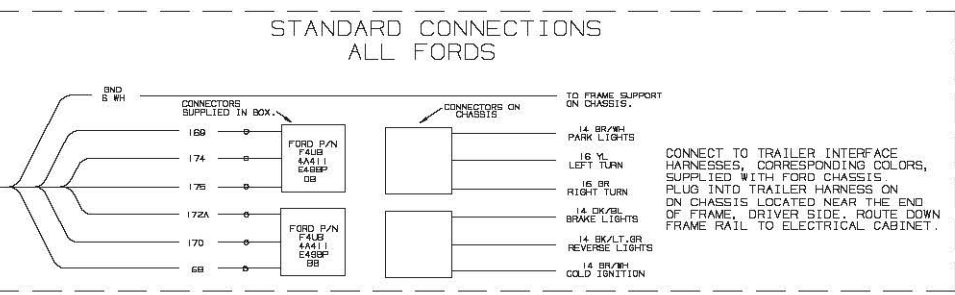
## STANDARD CONNECTIONS ALL FORDS

INSTALL RELAY INTO OPEN SLOT. RELAY IS SUPPLIED WITH CHASSIS IN TRAILER HARNESS PACKAGE.

CHASSIS POWER DISTRIBUTION LOCATED IN ENGINE COMPARTMENT, DRIVER SIDE



SWITCH CABINET  
CONNECTORS LOCATED ON HARNESS 52003591



BODY-CHASSIS INTERFACE  
FORD CHASSIS SRW, DRW

Thomas  
52003909 D

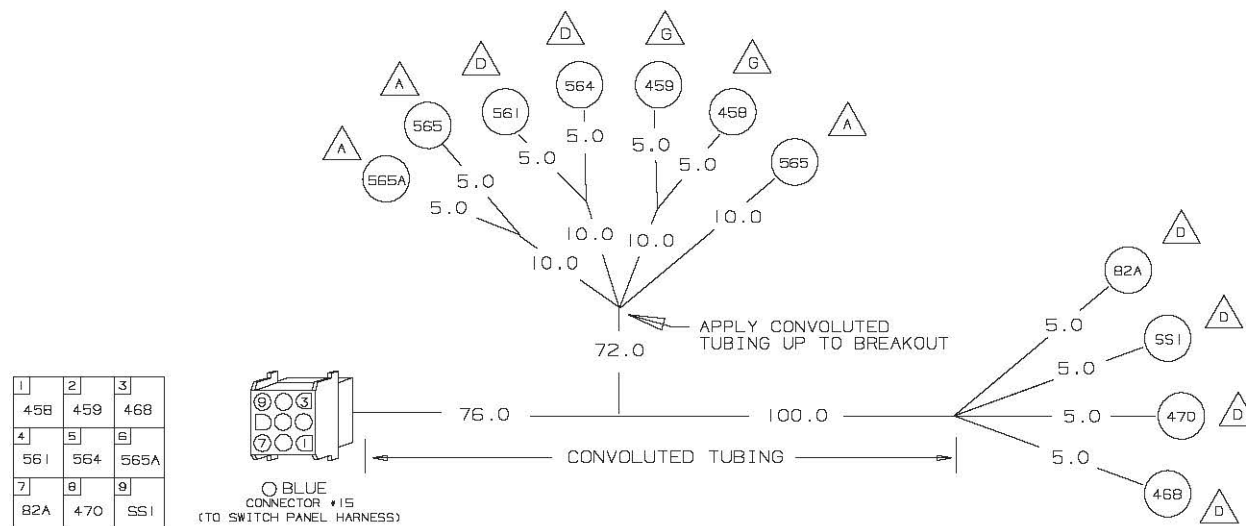
CHASSIS TO BODY  
INTERFACE, FORD  
MODEL

End Date: 9/4/02



CONN	VENDOR	PART #	DESCRIPTION	QTY
I	CARLING	98916716001	SWITCH CONNECTOR	X
	PED	XX	18-20 GA TERMINAL	X
	PED	XX	14-16 GA TERMINAL	X
15	AMP	XX	14-20 GA. TERMINAL, PIN.	X
	AMP	XX	10-12 GA. TERMINAL, PIN.	X
	AMP	770028-1	9 POSITION CONNECTOR, CAP.	1
RELAY K1	HELLA	87122	HOUSING-RELAY, 5 POSITION.	X
	XX	XX	TERMINAL-FEMALE, 1/4", 14-16 GA.	X
	XX	XX	TERMINAL-FEMALE, 1/4", 10-12 GA.	X

LEAD #	AWG	COLOR	DESCRIPTION
459	10	ORANGE/BLACK	IGN. SIDE OF STARTER CIRCUIT.
458	10	ORANGE	SOLENOID SIDE OF STARTER CIRCUIT.
561	16	LIGHT GREEN	TRANSMISSION LOCK-OUT LOOP.
564	16	GREEN/WHITE	TRANSMISSION LOCK-OUT LOOP.
82A	16	BLUE/WHITE	CROSSING ARM SOLENOID, SIGNAL.
SSI	14	RED	CROSSING ARM POWER FEED.
470	14	BLACK	TO CROSSING ARM HEATER ELEMENT
468	14	ORANGE	HEATED MIRROR FEED, DUADS.
565	16	YELLOW	PARK BRAKE SIGNAL, (-).
565A	16	YELLOW	PARK SWITCH SIGNAL, (-) NC.



10. USE BLACK SLIT POLYAMIDE OR NYLON HEAT RESISTANT CONDUIT WITH A MINIMUM OF 120 DEGREES CENTIGRADE CONTINUOUS OPERATING TEMPERATURE WHERE INDICATED. SECURELY TAPE CONDUIT TO HARNESS ON ENDS.
9. WHERE "X" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEEDED FOR TERMINATION.
8. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
7. CONNECTORS AND BREAK-OUTS MUST FACE AS INDICATED ON THE DRAWING.
6. USE WIRE TIES TO HOLD HARNESS WHERE NEEDED, MINIMUM AMOUNT AND SIZE.
5. FULLY TAPE HARNESS WHERE HEAVY LINES HAVE BEEN SHOWN. IN TAPED AREAS, THE HARNESS MUST BE SMOOTH AND NON-TWISTED.
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
3. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
2. TAG HARNESS FOR IDENTIFICATION.
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.

NOTES:

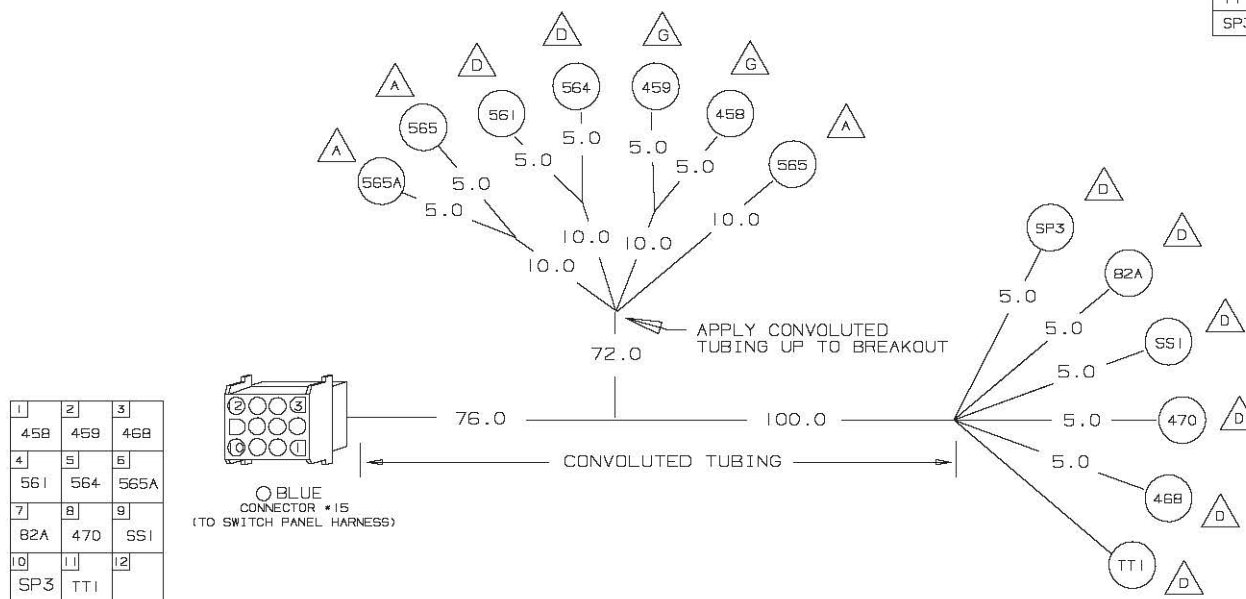
B	XX	XX	BUTT SPLICE, 10-12 GA. YELLOW	X
F	XX	XX	RING TERMINAL, 4 GA., 3/8" STUD.	X
E	XX	XX	RING TERMINAL, 4 GA., 1/4" STUD.	X
D	XX	XX	BUTT SPLICE, 14-16 GA BLUE.	X
C	XX	XX	RING TERMINAL, #10 STUD, 14-16 GA.	X
B	XX	XX	MALE RECP., 1/4", 14-16 GA.	X
A	XX	XX	FEMALE FAST-ON, 1/4", 14-16 GA.	X
	VENDOR	PART #	DESCRIPTION	QTY

## BODY/CHASSIS INTERFACE FORD MODEL MINOTOUR OPTION HARNESS

<b>Thomas</b> SOLUTIONS	<b>52003901 C</b>
<b>HARNESS, BODY CHASSIS OPTION INTER- FACE, FORD</b>	
End Date: 6/11/01	

CONN	VENDOR	PART #	DESCRIPTION	QTY
I	CARLING	89916716001	SWITCH CONNECTOR	X
	PED	XX	18-20 GA TERMINAL	X
	PED	XX	14-16 GA TERMINAL	X
IS	AMP	XX	14-20 GA. TERMINAL, PIN.	X
	AMP	XX	10-12 GA. TERMINAL, PIN.	X
	AMP	770029-1	12 POSITION CONNECTOR, CAP.	1
RELAY KI	HELLA	87122	HOUSING-RELAY, 5 POSITION.	X
	XX	XX	TERMINAL-FEMALE, 1/4", 14-16 GA.	X
	XX	XX	TERMINAL-FEMALE, 1/4", 10-12 GA.	X

LEAD #	AWG	COLOR	DESCRIPTION
459	10	ORANGE/BLACK	IGN. SIDE OF STARTER CIRCUIT.
458	10	ORANGE	SOLENOID SIDE OF STARTER CIRCUIT.
561	16	LIGHT GREEN	TRANSMISSION LOCK-OUT LOOP.
564	16	GREEN/WHITE	TRANSMISSION LOCK-OUT LOOP.
82A	16	BLUE/WHITE	CROSSING ARM SOLENOID, SIGNAL.
SS1	14	RED	CROSSING ARM POWER FEED.
470	14	BLACK	TO CROSSING ARM HEATER ELEMENT
468	14	ORANGE	HEATED MIRROR FEED, QUADS.
565	16	YELLOW	PARK BRAKE SIGNAL, (-).
565A	16	YELLOW	PARK SWITCH SIGNAL, (-) NC.
TT1	16	YELLOW	ELECTROMAGNET POWER FEED, (12V) IGN.
SP3	16	YELLOW	SPARE CIRCUIT (HORN ETC.)



10. USE BLACK SLIT POLYAMIDE OR NYLON HEAT RESISTANT CONDUIT WITH A MINIMUM OF 120 DEGREES CONTRIGRADE CONTINUOUS OPERATING TEMPERATURE WHERE INDICATED. SECURELY TAPE CONDUIT TO HARNESS ON ENDS.
9. WHERE "X" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEEDED FOR TERMINATION.
8. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
7. CONNECTORS AND BREAK-OUTS MUST FACE AS INDICATED ON THE DRAWING.
6. USE WIRE TIES TO HOLD HARNESS WHERE NEEDED, MINIMUM AMOUNT AND SIZE.
5. FULLY TAPE HARNESS WHERE HEAVY LINES HAVE BEEN SHOWN. IN TAPED AREAS, THE HARNESS MUST BE SMOOTH AND NON-TWISTED.
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
3. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
2. TAG HARNESS FOR IDENTIFICATION.
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.

NOTES:

G	XX	XX	BUTT SPLICE, 10-12 GA. YELLOW	X
F	XX	XX	RING TERMINAL, 4 GA., 3/8" STUD.	X
E	XX	XX	RING TERMINAL, 4 GA., 1/4" STUD.	X
D	XX	XX	BUTT SPLICE, 14-16 GA BLUE.	X
C	XX	XX	RING TERMINAL, #10 STUD, 14-16 GA.	X
B	XX	XX	MALE RECEPT., 1/4", 14-16 GA.	X
A	XX	XX	FEMALE FAST-ON, 1/4", 14-16 GA.	X
VENDOR	PART #		DESCRIPTION	QTY

## BODY/CHASSIS INTERFACE FORD MODEL MINOTOUR OPTION HARNESS

<b>Thomas</b> CABLES & WIRING	<b>52004985 B</b>
<b>HARNESS, BODY CHASSIS OPTION INTER-FACE, FORD</b> Effective Date: 6/12/01 End Date: 9/4/02	



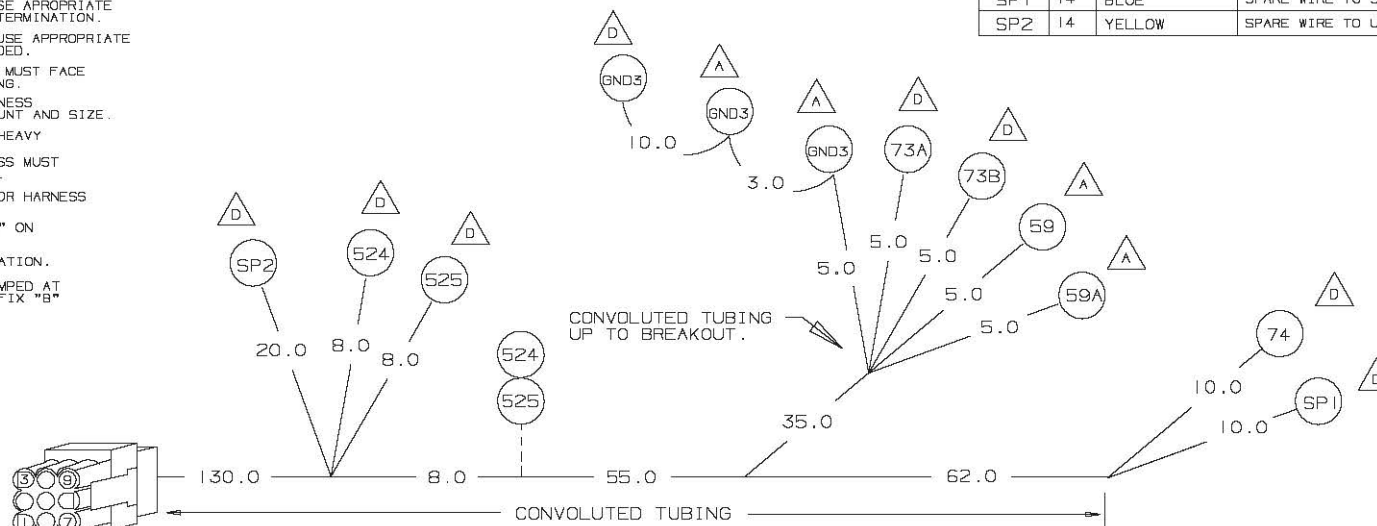
CONN	VENDOR	PART #	DESCRIPTION	QTY
11	AMP	770021-1	9 POSITION CONNECTOR, PLUG.	1
	AMP	XX	14-20 GA. TERMINAL, RECEPTICAL.	X
	AMP	XX	10-12 GA. TERMINAL, RECEPTICAL.	X

11. LIGHTLY TAPE BACK CIRCUITS SP1 AND SP2 TO MAIN BODY OF HARNESS.
10. USE BLACK SLIT POLYAMIDE OR NYLON HEAT RESISTANT CONDUIT WITH A MINIMUM OF 120 DEGREES CONTRIGRADE CONTINUOUS OPERATING TEMPERATURE WHERE INDICATED. SECURELY TAPE CONDUIT TO HARNESS ON ENDS.
9. WHERE "X" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEEDED FOR TERMINATION.
8. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
7. CONNECTORS AND BREAK-OUTS MUST FACE AS INDICATED ON THE DRAWING.
6. USE WIRE TIES TO HOLD HARNESS WHERE NEEDED, MINIMUM AMOUNT AND SIZE.
5. FULLY TAPE HARNESS WHERE HEAVY LINES HAVE BEEN SHOWN. IN TAPED AREAS, THE HARNESS MUST BE SMOOTH AND NON-TWISTED.
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
3. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
2. TAG HARNESS FOR IDENTIFICATION.
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.

NOTES:

1	2	3
GND3	59A	59
4	5	6
	SP1	74
7	8	9
SP2	73B	73A

○ GREEN  
CONNECTOR #11  
(TO SWITCH PANEL HARNESS)



LEAD #	AWG	COLOR	DESCRIPTION
59	16	RED/BLACK	DOOR SWITCH (GND) TO FLASHER.
59A	16	RED/WHITE	DOOR SWITCH (GND) TO RELAYS.
GND3	14	WHITE	GND FOR DOOR SWITCH AND DASH FAN.
74	16	BLACK	STEP LIGHT FEED. (12V+)
73A	14	RED	DASH FAN POWER FEED, LOW SPEED.
73B	14	ORANGE	DASH FAN POWER FEED, HIGH SPEED.
524	14	ORANGE	SHORTING CIRCUIT FOR BRAKE FEED.
525	14	BLACK/WHITE	SHORTING CIRCUIT FOR BRAKE FEED.
SP1	14	BLUE	SPARE WIRE TO STEPWELL.
SP2	14	YELLOW	SPARE WIRE TO UNDERDASH.

## DOOR SWITCH, DASH FAN, STEP/DOOR LIGHTING FORD MINOTOUR STANDARD HARNESS

F	XX	XX	RING TERMINAL, 4 GA., 3/8" STUD.	X
E	XX	XX	RING TERMINAL, 4 GA., 1/4" STUD.	X
D	XX	XX	BUTT SPLICE, 14-16 GA BLUE.	X
C	XX	XX	RING TERMINAL, #10 STUD, 14-16 GA.	X
B	XX	XX	MALE RECEPT., 1/4", 14-16 GA.	X
A	XX	XX	FEMALE FAST-ON, 1/4", 14-16 GA.	X
	VENDOR	PART #	DESCRIPTION	QTY

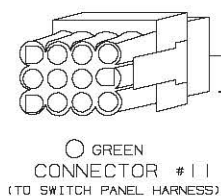
<b>Thomas</b> SOLUTIONS	<b>52003902 C</b>
<b>HARNESS, BODY CHASSIS STANDARD INTERFACE, FORD</b>	
End Date: 3/17/02	

CONN	VENDOR	PART #	DESCRIPTION	QTY
11	AMP	770022-1	12 POSITION CONNECTOR, PLUG.	1
	AMP	XX	14-20 GA. TERMINAL, RECEPTICAL.	X
	AMP	XX	10-12 GA. TERMINAL, RECEPTICAL.	X

11. LIGHTLY TAPE BACK CIRCUITS SP1 AND SP2 TO MAIN BODY OF HARNESS.
10. USE BLACK SLIT POLYAMIDE OR NYLON HEAT RESISTANT CONDUIT WITH A MINIMUM OF 120 DEGREES CONTRIGRADE CONTINUOUS OPERATING TEMPERATURE WHERE INDICATED. SECURELY TAPE CONDUIT TO HARNESS ON ENDS.
9. WHERE "X" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEEDED FOR TERMINATION.
8. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
7. CONNECTORS AND BREAK-OUTS MUST FACE AS INDICATED ON THE DRAWING.
6. USE WIRE TIES TO HOLD HARNESS WHERE NEEDED, MINIMUM AMOUNT AND SIZE.
5. FULLY TAPE HARNESS WHERE HEAVY LINES HAVE BEEN SHOWN. IN TAPED AREAS, THE HARNESS MUST BE SMOOTH AND NON-TWISTED.
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
3. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
2. TAG HARNESS FOR IDENTIFICATION.
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.

NOTES:

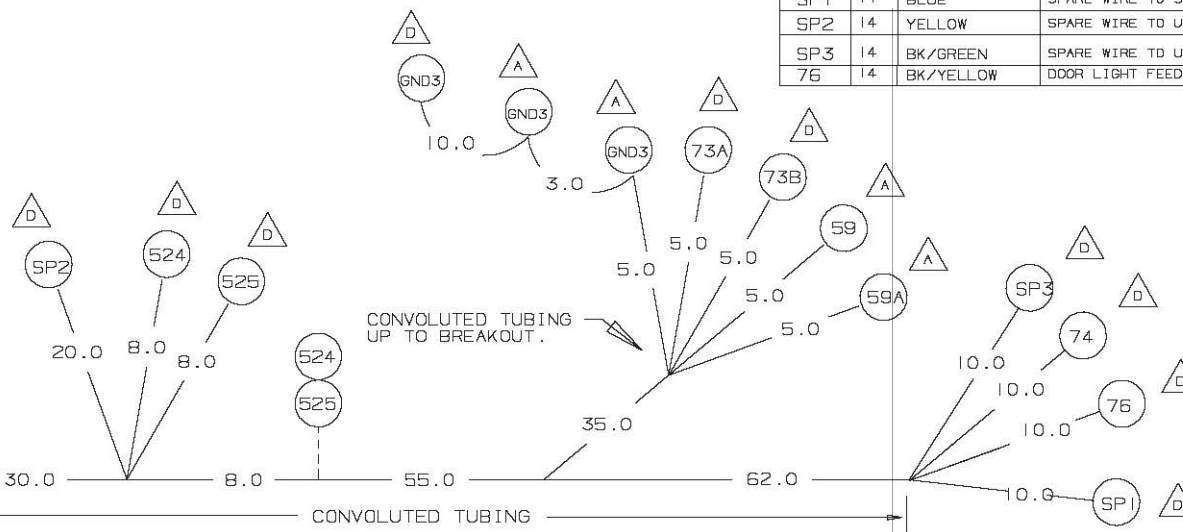
1	2	3
GND3	59A	59
4	5	6
.	76	74
7	8	9
SP2	73B	73A
10	11	12
SP1	SP3	.



## DOOR SWITCH, DASH FAN, STEP/DOOR LIGHTING FORD MINOTOUR STANDARD HARNESS

F	XX	XX	RING TERMINAL, 4 GA., 3/8" STUD.	X
E	XX	XX	RING TERMINAL, 4 GA., 1/4" STUD.	X
D	XX	XX	BUTT SPLICE, 14-16 GA BLUE.	X
C	XX	XX	RING TERMINAL, #10 STUD, 14-16 GA.	X
B	XX	XX	MALE RECEPT., 1/4", 14-16 GA.	X
A	XX	XX	FEMALE FAST-ON, 1/4", 14-16 GA.	X
VENDOR	PART #		DESCRIPTION	QTY

LEAD #	AWG	COLOR	DESCRIPTION
59	16	RED/BLACK	DOOR SWITCH (GND) TO FLASHER.
59A	16	RED/WHITE	DOOR SWITCH (GND) TO RELAYS.
GND3	14	WHITE	GND FOR DOOR SWITCH AND DASH FAN.
74	16	BLACK	STEP LIGHT FEED. (12V+)
73A	14	RED	DASH FAN POWER FEED, LOW SPEED.
73B	14	ORANGE	DASH FAN POWER FEED, HIGH SPEED.
524	14	ORANGE	SHORTING CIRCUIT FOR BRAKE FEED.
525	14	BLACK/WHITE	SHORTING CIRCUIT FOR BRAKE FEED.
SP1	14	BLUE	SPARE WIRE TO STEPWELL.
SP2	14	YELLOW	SPARE WIRE TO UNDERDASH.
SP3	14	BK/GREEN	SPARE WIRE TO UNDERDASH.
76	14	BK/YELLOW	DOOR LIGHT FEED



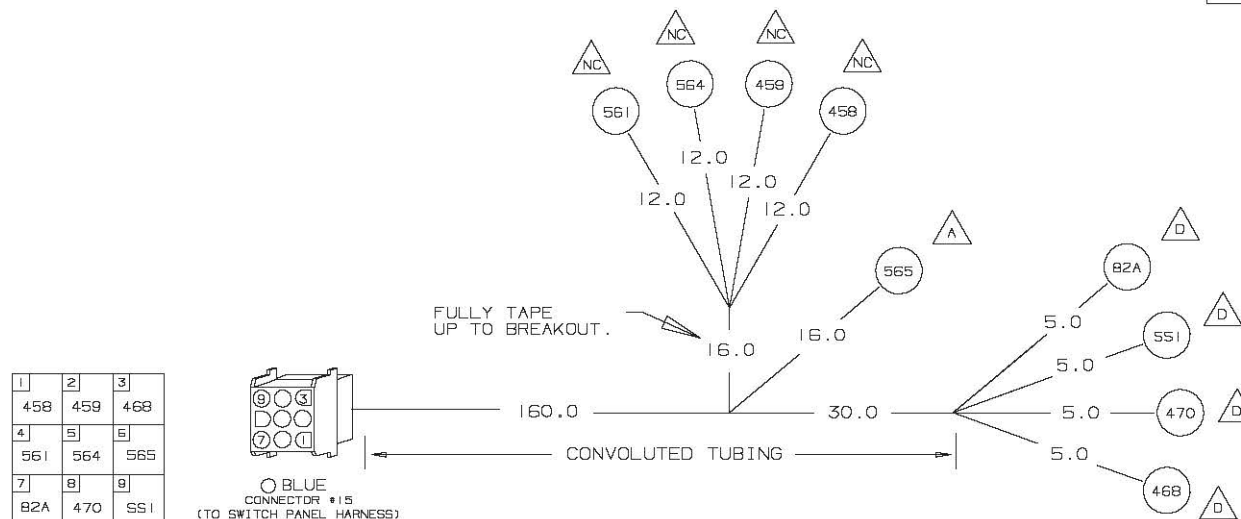
**52005265 A**

**HARNESS, BODY  
CHASSIS STANDARD  
INTERFACE, FORD**

Effective Date: 3/18/02

CONN	VENDOR	PART #	DESCRIPTION	QTY
15	AMP	XX	14-20 GA. TERMINAL, PIN.	X
	AMP	XX	10-12 GA. TERMINAL, PIN.	X
	AMP	770028-1	9 POSITION CONNECTOR, CAP.	1

LEAD #	AWG	COLOR	DESCRIPTION
459	10	ORANGE/BLACK	IGN. SIDE OF STARTER CIRCUIT.
458	10	ORANGE	SOLENOID SIDE OF STARTER CIRCUIT.
561	16	LIGHT GREEN	TRANSMISSION LOCK-OUT LOOP.
564	16	GREEN/WHITE	TRANSMISSION LOCK-OUT LOOP.
82A	16	BLUE/WHITE	CROSSING ARM SOLENOID, SIGNAL.
SS1	14	RED	CROSSING ARM POWER FEED.
470	14	BLACK	TO CROSSING ARM HEATER ELEMENT
468	14	ORANGE	HEATED MIRROR FEED, QUADS.
565	16	YELLOW	PARK BRAKE SIGNAL, (-).



1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.
2. TAG HARNESS FOR IDENTIFICATION.
3. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
5. FULLY TAPE HARNESS WHERE HEAVY LINES HAVE BEEN SHOWN. IN TAPED AREAS, THE HARNESS MUST BE SMOOTH AND NON-TWISTED.
6. USE WIRE TIES TO HOLD HARNESS WHERE NEEDED, MINIMUM AMOUNT AND SIZE.
7. CONNECTORS AND BREAK-OUTS MUST FACE AS INDICATED ON THE DRAWING.
8. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
9. WHERE "X" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEEDED FOR TERMINATION.
10. USE BLACK SLIT POLYAMIDE OR NYLON HEAT RESISTANT CONDUIT WITH A MINIMUM OF 120 DEGREES CONTRIGRADE CONTINUOUS OPERATING TEMPERATURE WHERE INDICATED. SECURELY TAPE CONDUIT TO HARNESS ON ENDS.

NOTES:

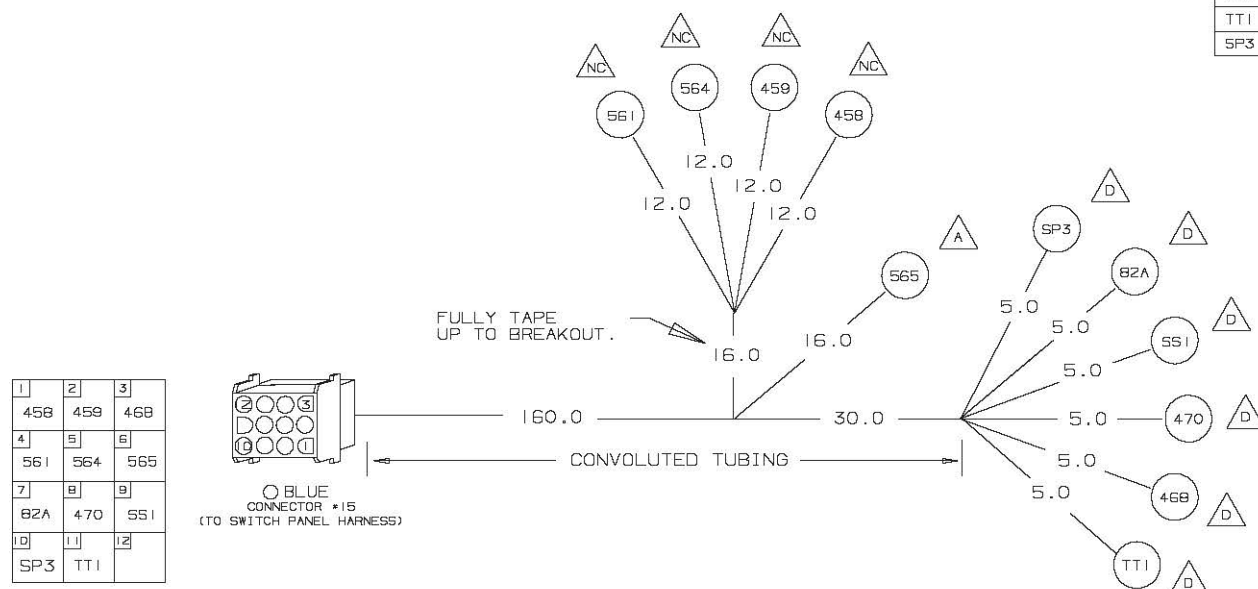
G	XX	XX	BUTT SPLICE, 10-12 GA. YELLOW	X
F	XX	XX	RING TERMINAL, 4 GA., 3/8" STUD.	X
E	XX	XX	RING TERMINAL, 4 GA., 1/4" STUD.	X
D	XX	XX	BUTT SPLICE, 14-16 GA BLUE.	X
C	XX	XX	RING TERMINAL, #10 STUD, 14-16 GA.	X
B	XX	XX	MALE RECEPT., 1/4", 14-16 GA.	X
A	XX	XX	FEMALE FAST-ON, 1/4", 14-16 GA.	X
VENDOR		PART #	DESCRIPTION	QTY

## BODY/CHASSIS INTERFACE OPTION HARNESS

<b>Thomas</b> SOLUTIONS	<b>52003776 C</b>
<b>HARNESS, BODY OPTION, CHASSIS INTERFACE, GM</b>	
End Date: 6/10/01	

CONN	VENDOR	PART #	DESCRIPTION	QTY
15	AMP	XX	14-20 GA. TERMINAL, PIN.	X
	AMP	XX	10-12 GA. TERMINAL, PIN.	X
	AMP	770029-1	12 POSITION CONNECTOR, CAP.	1

LEAD #	AWG	COLOR	DESCRIPTION
459	10	ORANGE/BLACK	IGN. SIDE OF STARTER CIRCUIT.
458	10	ORANGE	SOLENOID SIDE OF STARTER CIRCUIT.
561	16	LIGHT GREEN	TRANSMISSION LOCK-OUT LOOP.
564	16	GREEN/WHITE	TRANSMISSION LOCK-OUT LOOP.
82A	16	BLUE/WHITE	CROSSING ARM SOLENOID, SIGNAL.
SS1	14	RED	CROSSING ARM POWER FEED.
470	14	BLACK	TO CROSSING ARM HEATER ELEMENT
468	14	ORANGE	HEATED MIRROR FEED, QUADS.
565	16	YELLOW	PARK BRAKE SIGNAL, (-).
TT1	16	YELLOW	ELECTROMAGNET POWER FEED, (12V) IGN.
SP3	16	YELLOW	SPARE CIRCUIT (HORN ETC.)



10. USE BLACK SLIT POLYAMIDE OR NYLON HEAT RESISTANT CONDUIT WITH A MINIMUM OF 120 DEGREES CONTRIBRADE CONTINUOUS OPERATING TEMPERATURE WHERE INDICATED. SECURELY TAPE CONDUIT TO HARNESS ON ENDS.
9. WHERE "X" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEEDED FOR TERMINATION.
8. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
7. CONNECTORS AND BREAK-OUTS MUST FACE AS INDICATED ON THE DRAWING.
6. USE WIRE TIES TO HOLD HARNESS WHERE NEEDED, MINIMUM AMOUNT AND SIZE.
5. FULLY TAPE HARNESS WHERE HEAVY LINES HAVE BEEN SHOWN. IN TAPED AREAS, THE HARNESS MUST BE SMOOTH AND NON-TWISTED.
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
3. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
2. TAG HARNESS FOR IDENTIFICATION.
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.

NOTES:

G	XX	XX	BUTT SPLICE, 10-12 GA. YELLOW	X
F	XX	XX	RING TERMINAL, 4 GA., 3/8" STUD.	X
E	XX	XX	RING TERMINAL, 4 GA., 1/4" STUD.	X
D	XX	XX	BUTT SPLICE, 14-16 GA BLUE.	X
C	XX	XX	RING TERMINAL, #10 STUD, 14-16 GA.	X
B	XX	XX	MALE RECEPT., 1/4", 14-16 GA.	X
A	XX	XX	FEMALE FAST-ON, 1/4", 14-16 GA.	X
VENDOR	PART #		DESCRIPTION	QTY

## BODY/CHASSIS INTERFACE OPTION HARNESS



**HARNESS, BODY OPTION,  
CHASSIS INTERFACE, GM**

Effective Date: 6/11/01



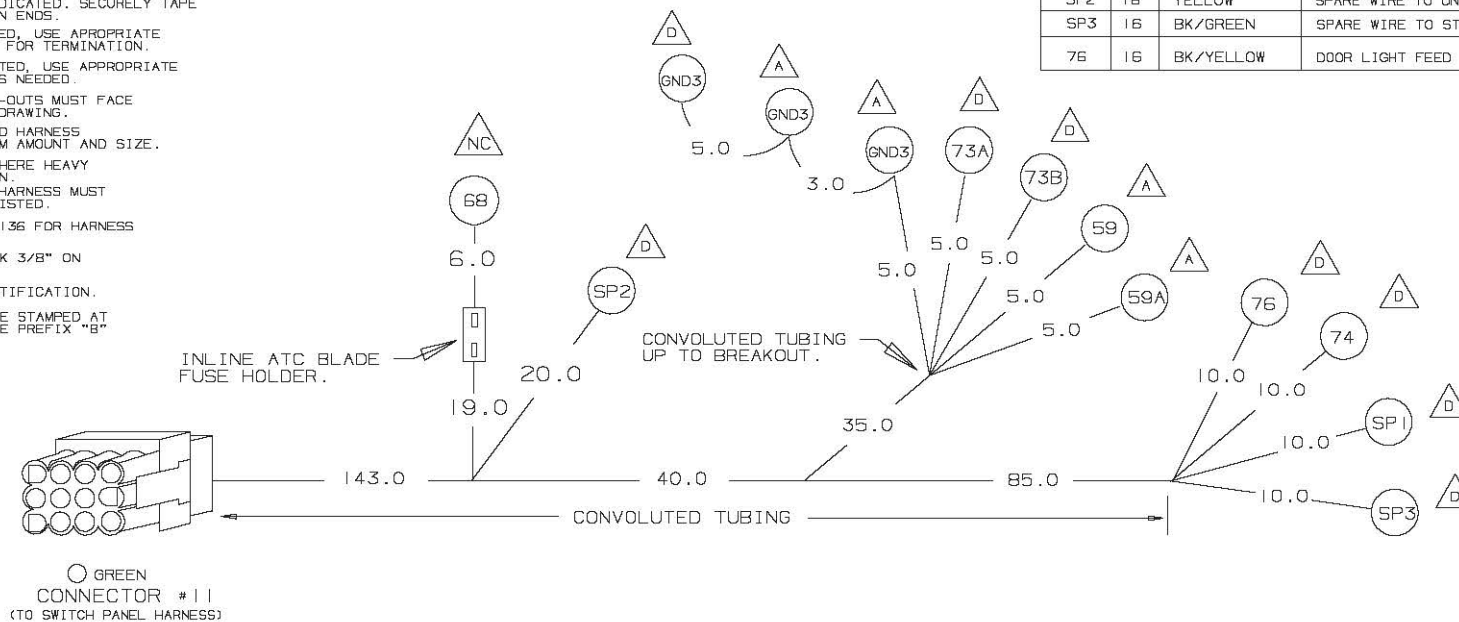


CONN	VENDOR	PART #	DESCRIPTION	QTY
11	AMP	XX	14-20 GA. TERMINAL, RECEPTICAL.	X
	AMP	XX	10-12 GA. TERMINAL, RECEPTICAL.	X
	AMP	770022-1	12 POSITION CONNECTOR, PLUG	1
INLINE FUSE	BUSS	HHC	3-20 AMP ATC BLADE TYPE FUSE HOLDER.	1

11. LIGHTLY TAPE BACK CIRCUITS SP1 AND SP3 TO MAIN BODY OF HARNESS.
10. USE BLACK SLIT POLYAMIDE OR NYLON HEAT RESISTANT CONDUIT WITH A MINIMUM OF 120 DEGREES CONTRIGRADE CONTINUOUS OPERATING TEMPERATURE WHERE INDICATED. SECURELY TAPE CONDUIT TO HARNESS ON ENDS.
9. WHERE "X" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEEDED FOR TERMINATION.
8. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
7. CONNECTORS AND BREAK-OUTS MUST FACE AS INDICATED ON THE DRAWING.
6. USE WIRE TIES TO HOLD HARNESS WHERE NEEDED, MINIMUM AMOUNT AND SIZE.
5. FULLY TAPE HARNESS WHERE HEAVY LINES HAVE BEEN SHOWN. IN TAPED AREAS, THE HARNESS MUST BE SMOOTH AND NON-TWISTED.
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
3. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
2. TAG HARNESS FOR IDENTIFICATION.
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.

NOTES:

1	2	3
GND3	59A	59
4	5	6
68	76	74
7	8	9
SP2	73B	73A
10	11	12
SP1	SP3	.



LEAD #	AWG	COLOR	DESCRIPTION
59	16	RED/BLACK	DOOR SWITCH (GND) TO FLASHER.
59A	16	RED/WHITE	DOOR SWITCH (GND) TO RELAYS.
GND3	14	WHITE	GND FOR DOOR SWITCH AND DASH FAN.
74	16	BLACK	STEP LIGHT FEED. (12V+)
73A	14	RED	DASH FAN POWER FEED, LOW SPEED.
73B	14	ORANGE	DASH FAN POWER FEED, HIGH SPEED.
68	16	BROWN	COLD IGN., CHASSIS TO BODY FEED.
SP1	14	BLUE	SPARE WIRE TO STEPWELL.
SP2	16	YELLOW	SPARE WIRE TO UNDER DASH.
SP3	16	BK/GREEN	SPARE WIRE TO STEPWELL.
76	16	BK/YELLOW	DOOR LIGHT FEED

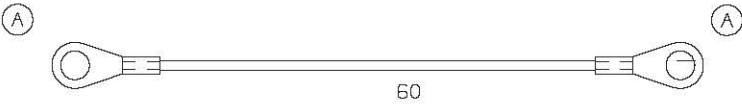
## DOOR SWITCH, DASH FAN, STEP LIGHTING STANDARD HARNESS

F	XX	XX	RING TERMINAL, 4 GA., 3/8" STUD.	X
E	XX	XX	RING TERMINAL, 4 GA., 1/4" STUD.	X
D	XX	XX	BUTT SPLICE, 14-16 GA BLUE.	X
C	XX	XX	RING TERMINAL, #10 STUD, 14-16 GA.	X
B	XX	XX	MALE RECEP., 1/4", 14-16 GA.	X
A	XX	XX	FEMALE FAST-ON, 1/4", 14-16 GA.	X
	VENDOR	PART #	DESCRIPTION	QTY


<b>Thomas</b> CABLES & WIRING	<b>52005256 C</b>
<b>HARNESS, BODY TO CHASSIS INTERFACE, STANDARD, GM</b> Effective Date: 12/3/01 End Date: 9/5/02	

1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"  
ON ALL LEADS.
2. TAG HARNESS FOR IDENTIFICATION
3. SPIRAL TAPE OUTSIDE OF CONDUIT. TAPE  
CONDUIT TO WIRE ON ENDS.
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
5. ALL DIMENSIONS ARE IN INCHES.
6. CONVOLUTED TUBING TO BE INSTALLED FULL LENGTH BY  
LINESMEN.

LEAD	AWG	COLOR	DESCRIPTION
.	.	.	.
PWR	2	RED	CHASSIS TO BODY POWER FEED



A	52005289	RING TERMINAL, 2 GA. 3/8" STUD	2
	PART #	DESCRIPTION	QTY

	52005247 B
HARNESS, CHASSIS BODY POWER FEED, 2 GA. JUMPER	
Effective Date: 9/20/01	

4.REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.

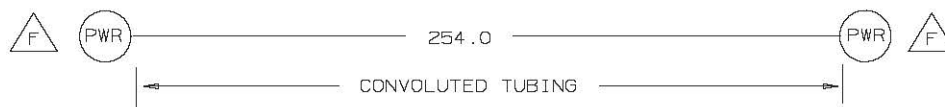
3.SPIRAL TAPE OUTSIDE OF CONDUIT. TAPE CONDUIT TO WIRE ON ENDS.

2.TAG HARNESS FOR IDENTIFICATION.

1.CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"


NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
.	.	.	.
PWR	4	RED	CHASSIS TO BODY POWER FEED.



## CHASSIS-BODY POWER FEED

F	.	.	RING TERMINAL, 4 GA., 5/16" STUD.	2
E	.	.	RING TERMINAL, 4 GA., 1/4" STUD.	.
D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEP., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	.
VENDOR		PART #	DESCRIPTION	QTY

	52003774 A
HARNESS, CHASSIS BODY POWER FEED, 4 GA., RED	

- 4.REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
- 3.SPIRAL TAPE OVER CONDUIT.  
TAPE CONDUIT TO WIRE ON ENDS.
- 2.TAG HARNESS FOR IDENTIFICATION.
- 1.CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"
- NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
PWR	4	RED	CHASSIS TO BODY POWER FEED.
.	.	.	.



BODY/CHASSIS INTERFACE POWER FEED  
STANDARD OPERATION

F	.	.	RING TERMINAL, 4 GA., 3/8" STUD.	1
E	.	.	RING TERMINAL, 4 GA., 1/4" STUD.	1
D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEP., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	.
VENDOR		PART #	DESCRIPTION	QTY



52003775 A

HARNESS, CHASSIS  
BODY POWER, 4 GA.  
JUMPER



CIR	GA	COLOR	DESCRIPTION
1	12	BLACK	LEFT REAR WARNING LIGHT (RED)
2	12	BROWN	RIGHT FRONT WARNING LIGHT (RED)
3	12	ORANGE	RIGHT REAR WARNING LIGHT (RED)
			RIGHT RED WARNING LIGHT FEED
4	12	YELLOW	LEFT FRONT WARNING LIGHT (RED)
5	12	BLUE	LEFT REAR WARNING LIGHT (AMBER)
			LEFT AMBER WARNING LIGHT FEED
6	12	WHITE	RIGHT FRONT WARNING LIGHT (AMBER)
			FRONT AMBER WARNING LIGHT FEED
7	12	RED	RIGHT REAR WARNING LIGHT (AMBER)
			RIGHT AMBER WARNING LIGHT FEED
8	12	GREEN	LEFT FRONT WARNING LIGHT (AMBER)
9	16	DARK GREEN	RIGHT TURN SIGNAL (REAR & FRONT SIDE)
10	16	YELLOW	LEFT TURN SIGNAL (REAR & FRONT SIDE)
11	16	BROWN	RIGHT TAIL LIGHT
12	16	BROWN/WHITE	LEFT TAIL LIGHT
13	16	BLUE	RIGHT BACK-UP LIGHT
14	16	BLUE/WHITE	LEFT BACK-UP LIGHT
15	16	RED	RIGHT BRAKE LIGHT
16	16	RED/WHITE	LEFT BRAKE LIGHT
17	16	WHITE	MARKER LIGHTS (REAR)
18	16	WHITE/BLACK	PANEL LIGHTS
19	12	BLACK	INTERIOR LIGHTS
20	16	WHITE/BLACK	INTERIOR LIGHTS
21	12	BLACK	INTERIOR LIGHTS
22	16	BLUE	POWER VENT OR EXTRA
23	16	RED/BLACK	POWER VENT OR EXTRA
24	16	GREEN/WHITE	POWER VENT OR EXTRA
25	16	GREEN/BLACK	POWER VENT OR EXTRA
26	16	WHITE/BLACK	REAR DESTINATION SIGN
27	16	WHITE/BLACK	FRONT DESTINATION SIGN
28	16	YELLOW	RADIO POWER (BATT.)
29	16	DARK BLUE	REAR DOOR BUZZER (GND)
30	16	LIGHT BLUE	PULL CORD OR PUSH OUT SASH (GND)
31	16	WHITE/BLACK	SIDE DOOR BUZZER (GND)
32	16	YELLOW	VANDALOCK (GND)
33	16	WHITE	BUZZER FEED (REAR OR SIDE DOOR)
34	14	RED	FAN (OVERHEAD) OR EXTRA
35	14	WHITE	FAN (OVERHEAD) OR EXTRA
36	14	YELLOW	FAN (OVERHEAD) OR EXTRA
37	14	GREEN	FAN (OVERHEAD) OR EXTRA
38	16	PURPLE/BLACK	STROBE LIGHT OR EXTRA
39	16	PURPLE/WHITE	EXTRA
40	16	WHITE	MARKER LIGHTS (FRONT)
41	12	GREEN/WHITE	DEFROST LEFT (LOW) - ER
42	12	GREEN/BLACK	DEFROST LEFT (HIGH) - ER
43	12	RED/WHITE	DEFROST RIGHT (LOW) - ER
44	12	RED/BLACK	DEFROST RIGHT (HIGH) - ER
45	14	BLUE	STEPWELL HEAT (LOW) - ER
46	14	BLUE/WHITE	STEPWELL HEAT (HIGH) - ER
47	14	YELLOW	DRIVER'S HEAT (LOW) - ER
48	14	YELLOW/WHITE	DRIVER'S HEAT (HIGH) - ER
49	16	YELLOW	FRONT LEFT TURN SIGNAL (ER ONLY)
50	16	DK. GREEN	FRONT RIGHT TURN SIGNAL (ER ONLY)

CIR	GA	COLOR	DESCRIPTION
51	16	BROWN/WHITE	PARKING LIGHTS
52	16	BLUE/WHITE	STEPWELL LIGHT (DOOR SWITCH)
52A	16	BLUE/WHITE	STEPWELL LIGHT (DOOR SWITCH)
52B	16	BLUE/WHITE	STEPWELL LIGHT (DOOR SWITCH)
53	16	BLUE	WARNING LIGHT DOOR SWITCH TO GROUND
54	16	PURPLE	EXTRA
55	16	YELLOW	WARNING LIGHT PILOT LIGHT (AMBER) - 5
56	16	RED	WARNING LIGHT & STOP LIGHT PILOT LIGHT (RED) - 3
			WARNING LIGHT & STOP LIGHT PILOT LIGHT (RED) - 1
58	16	YELLOW	WARNING LIGHT PILOT LIGHT (AMBER) - 7
59	14	RED/BLACK	DOOR SW SIGNAL (GROUND) TO WARN LT FLASHER
60	14	RED/WHITE	LEFT WINDSHIELD WIPER (HIGH)
61	14	RED	RIGHT WINDSHIELD WIPER (HIGH)
62	14	GREEN/WHITE	LEFT WINDSHIELD WIPER (LOW)
63	14	GREEN	RIGHT WINDSHIELD WIPER (LOW)
64	14	BLACK/WHITE	LEFT WINDSHIELD WIPER (PARK)
65	14	BLACK	RIGHT WINDSHIELD WIPER (PARK)
66	14	BROWN	EXTRA
67	14	PURPLE/BLACK	WINDSHIELD WASHER
68	14	BLACK/WHITE	COLD IGNITION (ACC)
69	14	YELLOW/BLACK	FAN (NEW JERSEY DOOR SWITCH)
70	14	WHITE/BLACK	PANEL LIGHTS
71	14	BLACK	BOOSTER PUMP
72	16	BLACK/WHITE	WINDSHIELD WIPER SWITCH LIGHT
73	14	BROWN/WHITE	FAN
74	16	BLACK	STEPLIGHT
75	8	GREEN	GROUND
76	6	RED	CHASSIS TO BODY FEED
77	10	RED	FEED (WARNING LIGHTS)
78	14	BLACK	MASTER SWITCH TERMINAL ON WELDON
			FLASHER TO MASTER SWITCH
79	14	BLACK	MASTER SWITCH TO START SWITCH
80	14	GREEN	START SWITCH TO START SWITCH (+12V)
			TERMINAL ON FLASHER
81	14	BLUE	COLD IGNITION
82	14	BROWN	STOP ARM SWITCH TO STOP ARM SOLENOID
			TERMINAL ON FLASHER
83	14	BROWN/WHITE	STOP ARM SWITCH TO FUSE PANEL
84	12	WHITE	MASTER SWITCH TO FUSE PANEL
85	14	BLACK	REAR UNDERSEAT HEATER (HIGH)
86	14	RED	REAR UNDERSEAT HEATER (LOW)
87	14	GREEN	REAR UNDERSEAT HEATER (HIGH)
88	14	WHITE	REAR UNDERSEAT HEATER (LOW)
89	14	BLACK	FRONT UNDERSEAT HEATER (HIGH)
90	14	RED	FRONT UNDERSEAT HEATER (LOW)
91	14	GREEN	FRONT UNDERSEAT HEATER (HIGH)
92	14	WHITE	FRONT UNDERSEAT HEATER (LOW)
93	16	YELLOW	CDWL MOUNTED LEFT TURN SIGNAL LIGHT
94	16	BROWN	STEPLIGHT FEED (OPTION 329)
95	16	RED	BRAKE PILOT LIGHT
96	16	BLACK	JUMPER FOR 35B - {3,4,5,& 6} WITH FLASHER
97	16	BLACK	JUMPER TO START SWITCH
98	16	RED	ELECTRIC STOP SIGN SWITCH
99	16	BROWN	WINDSHIELD WIPER FEED
100	16	YELLOW	HEATER FEED

CIR	GA	COLOR	DESCRIPTION
101	16	GREEN	DOOR SWITCH TO GROUND
102	16	RED	WINDSHIELD WASHER FEED
103	14	GREEN	DIMMER SWITCH TO CLEARANCE LIGHT SWITCH
104	14	WHITE	DIMMER SWITCH (COMMON) TO CLEARANCE LIGHTS
105	14	RED	DIMMER SWITCH TO ELECTRONIC FLASHER
106	14	RED	ROOF MOUNTED AIR CONDITIONER
107	14	WHITE	ROOF MOUNTED AIR CONDITIONER
108	14	GREEN	ROOF MOUNTED AIR CONDITIONER
109	18	VIOLET/BLACK	RIGHT REAR SPEAKER (-)
110	18	VIOLET	RIGHT REAR SPEAKER (+)
111	18	GREEN	LEFT REAR SPEAKER (+)
112	18	GREEN/BLACK	LEFT REAR SPEAKER (-)
113	16	DARK BLUE	ESCAPE HATCH BUZZER
114	14	RED	RIGHT FRONT HEATER (LOW) - CONV.
115	14	RED/BLACK	RIGHT FRONT HEATER (HIGH) - CONV.
116	14	YELLOW	RIGHT FRONT HEATER (LOW) - CONV.
117	14	YELLOW/BLACK	RIGHT FRONT HEATER (HIGH) - CONV.
118	14	GREEN	RIGHT FRONT DEFROSTER (LOW) - CONV.
119	14	GREEN/BLACK	RIGHT FRONT DEFROSTER (HIGH) - CONV.
120	14	RED	STEPWELL DEFROSTER (LOW) - CONV.
121	14	RED/BLACK	STEPWELL DEFROSTER (HIGH) - CONV.
122	14	GREEN	STEPWELL HEATER (LOW) - CONV.
123	14	GREEN/BLACK	STEPWELL HEATER (HIGH) - CONV.
124	12	BLACK	FUSE PANEL FEED
125	16	GREEN	RIGHT FRONT HEATER (LOW) - MMFC
126	16	GREEN/BLACK	RIGHT FRONT HEATER (HIGH) - MMFC
127	16	RED	RIGHT FRONT HEATER (LOW) - MMFC
128	16	RED/BLACK	RIGHT FRONT HEATER (HIGH) - MMFC
129	16	YELLOW	RIGHT FRONT DEFROSTER (LOW) - MMFC
130	16	YELLOW/BLACK	RIGHT FRONT DEFROSTER (HIGH) - MMFC
131	16	BLUE	RIGHT FRONT DEFROSTER (LOW) - MMFC
132	16	BLUE/BLACK	RIGHT FRONT DEFROSTER (HIGH) - MMFC
133	16	PURPLE/WHITE	ROLL SIGN
134	16	PURPLE	ROLL SIGN
135	16	PURPLE	ROLL SIGN LIGHT
136	16	GREEN/BLACK	BODE DOOR (FRONT)
137	16	GREEN/WHITE	BODE DOOR (FRONT)
138	14	BROWN	EVAPORATOR COOLER
139	14	BROWN/WHITE	EVAPORATOR COOLER
140	14	GREEN	CHIME
141	14	GREEN/WHITE	REAR WINDOW WINDSHIELD WIPER
142	14	WHITE/BLACK	BODE DOOR (SIDE)
143	14	RED	BODE DOOR (SIDE)
144	14	ORANGE	BODE DOOR (SIDE)
145	14	GREEN	BODE DOOR (SIDE)
146	16	GREEN	SIGN OR CLEARANCE LIGHT
147	16	WHITE	SIGN OR CLEARANCE LIGHT
148	16	BLUE	FAN - CONV.
149	14	BLACK	RELAY TO FUSE PANEL TO FLASHER MOTOR
150	16	RED	FREQ. CONVERTER TO COLD IGNITION TO TACHOGRAPH



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CHART - CIRCUIT,  
ELECTRICAL (BODY)

CIR	GA	COLOR	DESCRIPTION
151	16	WHITE	FREQ. CONVERTER TO SPEEDOMETER
152	16	BLUE	FREQ. CONVERTER TO SPEEDOMETER
153	16	BLACK	TACHOGRAPH TO HOT FEED (BATTERY)
154	16	GRAY	TACHOGRAPH TO HEADLIGHT SWITCH
155	14	BLACK	RELAY TO 358 HARNESS
156	16	YELLOW	HI-BEAM HEADLIGHT
157	16	YELLOW/BLACK	LO-BEAM HEADLIGHT
158	16	WHITE	HEADLIGHT GROUND
159	16	WHITE/BLACK	TURN SIGNAL LIGHT GROUND
160	14	BLACK	WARNING LIGHT MONITOR FEED (RED) - 1
161	14		
162	14	ORANGE	WARNING LIGHT MONITOR FEED (RED) - 3
163	14		
164	14	BLUE	WARNING LIGHT MONITOR FEED (AMBER) - 5
165	14		
166	14	RED	WARNING LIGHT MONITOR FEED (AMBER) - 7
167	14		
168	14	BROWN	TAIL LIGHT FEED
169	16	BROWN/BLACK	TAIL LIGHT (CHASSIS TO TAIL LIGHT RELAY)
170	14	BLUE	BACK-UP LIGHT FEED
171	14		
172	14	RED	BRAKE LIGHT FEED
173	14		
174	14	YELLOW	LEFT TURN SIGNAL FEED
175	14	DARK GREEN	RIGHT TURN SIGNAL FEED
176	16	BLACK	DORAN FEED
177	16	WHITE	DORAN GROUND
178	14	BLACK	REMOTE CONTROL VENT SPEED CONTROL SW. (GND)
179	14	WHITE	REMOTE CONTROL VENT DIRECTION SWITCH
180	19	GREEN	REMOTE CONTROL VENT INDICATOR LIGHT
181	19	WHITE	REMOTE CONTROL VENT GROUND
182	19	RED	REMOTE CONTROL VENT MOTOR CONTROL SW.
183	19	ORANGE	REMOTE CONTROL VENT MOTOR CONTROL SW.
184	19	BROWN	REMOTE CONTROL VENT MOTOR CONTROL SW.
185	19	BLACK	REMOTE CONTROL VENT MOTOR CONTROL SW.
186	14	RED	T2 A.C. UNIT DRIVER'S SWITCH (8)
187	14	YELLOW	T2 A.C. UNIT HIGH - LOW SWITCH (8A)
188	14	ORANGE	T2 A.C. UNIT AUTO SWITCH (14)
189	14	GREEN/BLACK	T2 A.C. UNIT AUTO SWITCH (14A)
190	14	GREEN/WHITE	T2 A.C. UNIT AUTO SWITCH (10A)
191	14	GREEN	T2 A.C. UNIT AUTO SWITCH (10)
192	14	BLUE	T2 A.C. UNIT DRIVER'S ON LIGHT (36D)
193	14	BLUE/BLACK	T2 A.C. UNIT DRIVER'S ON LIGHT (CH)
194	14	BLUE/WHITE	T2 A.C. UNIT ON-OFF SWITCH (8AA)
195	14	BLACK	SWITCH TO #9 TERMINAL ON FLASHER
196	14	BLACK	SWITCH TO RELAY
197	14	GREEN	FEED TO SWITCH
198	14	YELLOW	PILOT LIGHT (AMBER) TO GROUND
199	14	GREEN	AMBER LIGHT SWITCH TO #11 TERMINAL ON FLASHER
200	16	YELLOW	PILOT LIGHT (AMBER) TO #6 TERMINAL ON FLASHER

CIR	GA	COLOR	DESCRIPTION
201	16	RED	PILOT LIGHT (RED) TO #1 TERMINAL ON FLASHER
202	16	WHITE	STOP ARM SWITCH TO RELAY (86)
203	16	WHITE	RELAY (86) TO RELAY (87)
204	14	RED	STOP ARM SWITCH TO RELAY (30)
205	14	RED	RELAY (30) TO #3 TERMINAL ON FLASHER
206	14	BLACK	RELAY GROUND
207	14	BLACK	PILOT LIGHT RELAY TO MASTER SWITCH ON FLASHER - MARYLAND
208	16	RED	PILOT LIGHT (RED) TO GROUND
209	16	RED	JUMPER FOR PILOT LIGHT
210	16	GREEN	GROUND JUMPER
211	10	RED	FUSE PANEL TO #6 TERMINAL ON FLASHER
212	10	BLUE	FUSE PANEL TO #12 TERMINAL ON FLASHER
213	10	ORANGE	FUSE PANEL TO #1 TERMINAL ON FLASHER
214	10	BLACK	FUSE PANEL TO #7 TERMINAL ON FLASHER
215	14	BLACK	LEFT REAR WARNING LIGHT (RED) TO MONITOR
216	14	BROWN	RIGHT FRONT WARNING LIGHT (RED) TO MONITOR
217	14	ORANGE	RIGHT REAR WARNING LIGHT (RED) TO MONITOR
218	14	YELLOW	LEFT FRONT WARNING LIGHT (RED) TO MONITOR
219	14	BLUE	LEFT REAR WARNING LIGHT (AMBER) TO MONITOR
220	14	WHITE	RIGHT FRONT WARNING LIGHT (AMBER) TO MONITOR
221	14	RED	RIGHT REAR WARNING LIGHT (AMBER) TO MONITOR
222	14	GREEN	LEFT FRONT WARNING LIGHT (AMBER) TO MONITOR
223	14	RED	FEED TO OVERRIDE SWITCH
224	14	WHITE	OVERRIDE SWITCH TO #3 TERMINAL ON FLASHER
225	16	RED	START SWITCH PILOT LIGHT TO #12 TERMINAL ON FLASHER
226	16	WHITE	PILOT LIGHT (RED) TO #7 TERMINAL ON FLASHER
227	14	BLUE	LIFTS, MEMORY RADIO, BUZZER, SIDE LIGHTS & A/C
228	14	BLACK	A.C. & FANS (BONDED)
229	14	WHITE	A.C. & FANS (BONDED)
230	18	ORANGE	EXTERNAL HORN(+)
231	19	WHITE/BLACK	EXTERNAL HORN (-)
232	10	YELLOW	ELECTRICAL STEP
233	14	BLACK	A.C. & CHIME
234	8	RED	A.C. TO EVAPORATOR GROUND
235	14	BLACK	EVAPORATOR RELAY TO PRESSURE SWITCH
236	16	RED	A.C. SWITCH TO MAIN RELAY
237	16	BLUE	COLD SIDE OF FAN HI - LO SWITCH TO FAN RELAY LS EVAPORATOR
238	14	GREEN	COLD SIDE THERMOSTAT TO R.H. EVAPORATOR FREEZE SWITCH
239	14	BLUE	14 AMP FEEDER BREAKER (FIREWALL) TO HOT SIDE THERMOSTAT
240	16	YELLOW	MAIN SWITCH TO ENGINE SPEED SOLENOID (CARB)
241	14	BLACK	HI-LO PRESSURE SWITCH (CONDENSOR) TO COMPRESSOR RELAY (FIREWALL)
242	8	BLUE	MAIN RELAY (FIREWALL) TO HI-LO RELAY "BATT" LS EVAPORATOR
243	8	BLUE	HI-LO RELAY "BATT" TO CONDENSOR FANS
244	8	BLUE	HI-LO RELAY "BATT" TO LO SPEED FANS RS EVAPORATOR
245	8	BLACK	HI-LO RELAY "COLD" TO HI SPEED FANS RS EVAPORATOR
246	14	GREEN	FREEZE L.S. EVAPORATOR TO FREEZE SWITCH SWITCH RS EVAPORATOR
247	14	WHITE	FREEZE SWITCH L.S. EVAPORATOR TO HI-LO PRESSURE SW. (CONDENSOR)
248	16	RED	14 AMP BREAKER, SW. CABINET (COLD SIDE IGN. RELAY) TO A.C. SW. (DASH)
249	16	BLUE	COLD SIDE CONTROL RELAY TO "BATT" SIDE OF 14 AMP BREAKER
250	16	WHITE	AUX. SIDE OF 14 AMP BREAKER TO "BATT" SIDE CLUTCH RELAY

CIR	GA	COLOR	DESCRIPTION
251	16	WHITE	COLD SIDE CLUTCH RELAY TO COMPRESSOR CLUTCH
252	14	YELLOW	GROUND JUMPER FOR ENGINE SPEED SOLENOID
253	16	BLUE	COLD SIDE OF THERMOSTAT TO FEED SIDE FAN HIGH-LOW SWITCH
254	10	BLACK	SWAMP COOLER
255	14	WHITE	WELDON STROBE LIGHT SYSTEM FEED
256	14	BLACK	WELDON STROBE LIGHT SYSTEM GROUND
257	16	RED	STROBE LIGHT DOOR SWITCH FEED
258	16	BLACK	STROBE LIGHT DOOR SWITCH COMMON
259	16	WHITE	STROBE LIGHT DOOR SWITCH NEGATIVE
260	16	WHITE	STROBE LIGHT FOOT SWITCH
261	16	BLACK	STROBE LIGHT FOOT SWITCH
262	14	RED	CONTROL TO POWER SUPPLY (FEED)
263	14	BLACK	CONTROL TO POWER SUPPLY (COMMON)
264	16	WHITE	CONTROL TO POWER SUPPLY (NEGATIVE)
265	16	ORANGE	CONTROL TO POWER SUPPLY (RED LIGHTS)
266	16	GREEN	CONTROL TO POWER SUPPLY (AMBER LIGHTS)
267	14	GREEN	RELAY (1) TO REMOTE REGULATOR (+)
268	14	RED	RELAY (2) TO ALTERNATOR (+)
269	14	BROWN	RELAY (3) TO IGNITION SWITCH
270	14	BLUE	REMOTE REGULATOR (F) TO ALTERNATOR (F)
271	14	BLACK	REMOTE REGULATOR (-) TO ALTERNATOR (-)
272	14	GREEN	REMOTE REGULATOR (+) TO ALTERNATOR (F)
273	14	WHITE	TIME DELAY RELAY (2) TO GREEN READY PILOT LIGHT
274	14	BROWN	TIME DELAY RELAY (8) TO WAVE SWITCHES
275	14	GREEN	WAVE SWITCHES TO TIME DELAY RELAY (7)
276	14	YELLOW	RELAY (85) TO EMERGENCY RELEASE PRESSURE SWITCH
277	16	RED	ENGINE COMP LT. SW. TO ENGINE COMP LIGHTS
278	16	RED	CON 6, PIN 1, FRONT DOOR #1 PILOT
279	16	BLUE	CON 6, PIN 2, REAR DOOR #2 PILOT
280	16	BLACK	CON 6, PIN 3, SPARE
281	16	RED/WHITE	CON 6, PIN 4, FRONT & REAR DOOR PILOTS
282	16	GREEN	CON 6, PIN 5, PASSENGER STOP LAMP
283	16	RED/BLACK	CON 6, PIN 6, A/C FROM A/C POWER SWITCH
284	16	BROWN	CON 6, PIN 7, DEST. SIGN (FRONT) SWITCH
285	16	YELLOW	CON 6, PIN 8, DEST. SIGN (SIDE) SWITCH
286	16	PURPLE	CON 6, PIN 9, FOG LAMP SWITCH
287	16	ORANGE	CON 6, PIN 10, EMERGENCY SIDE EXIT SWITCH
288	16	WHITE	CON 6, PIN 11, GROUND (MAIN IN)
289	16	YELLOW/BLACK	CON 6, PIN 12, GROUND (MAIN IN)
290	16	BROWN/WHITE	CON 6, PIN 13, SPARE
291	16	BLACK/WHITE	CON 6, PIN 14, SPARE
292	16	ORANGE/BLACK	CON 6, PIN 15, PASSENGER STOP LAMP
293	16	GREEN/WHITE	CON 6, PIN 16, SPARE
294	14	RED	CON 7, PIN 1, +12V POWER (DRIVERS DOME)
295	16	GREEN	CON 7, PIN 2, +12V LIGHT DIMMER IN (T87)
296	14	RED/WHITE	CON 7, PIN 4, +12V POWER (INTERIOR LIGHT)
297	16	BROWN	CON 7, PIN 5, GROUND LIGHT DIMMER IN (T82)
298	14	RED/BLACK	CON 7, PIN 7, +12V POWER (INTERIOR LIGHT)
299	14	ORANGE	CON 7, PIN 8, SPARE
300	14	WHITE/BLACK	CON 8, PIN 1, MARKER LIGHT SWITCH



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CHART - CIRCUIT,  
ELECTRICAL (BODY)



CIR	GA	COLOR	DESCRIPTION
301	14	BLACK	CON #8, PIN 1, MARKER LIGHT SWITCH
302	14	BLACK/WHITE	CON #8, PIN 4, LIGHT DIMMER GROUND (TB5)
303	14	RED	CON #8, PIN 6, LIGHT DIMMER +12V (TB7)
304	14	RED/WHITE	CON #8, PIN 7, DOOR POWER (FEED +12 V.)
305	14	BLUE	CON #8, PIN 8, DOOR POWER (FROM SWITCH)
306	14	BROWN	CON #8, PIN 9, SPARE
307	14	BROWN/WHITE	CON #8, PIN 10, FRONT DESTINATION SIGN (FEED + 12V)
308	14	BLUE/WHITE	CON #8, PIN 11, FRONT DESTINATION SIGN (FROM SWITCH)
309	14	PURPLE	CON #8, PIN 12, SPARE
310	14	GREEN	CON #8, PIN 13, SPARE
311	14	GREEN/WHITE	CON #8, PIN 14, T2 FAN SWITCH (LOW)
312	14	ORANGE	CON #8, PIN 15, T2 FAN SWITCH (POWER IN)
313	14	YELLOW	CON #8, PIN 16, BOOSTER HEAT PUMP SWITCH (+12V)
314	14	YELLOW/WHITE	CON #8, PIN 17, DEFROST MIRROR #1 (FEED +12V)
315	14	GREEN/BLACK	CON #8, PIN 18, DEFROST MIRROR #1 (FROM SWITCH)
316	14	BROWN/BLACK	CON #8, PIN 19, T2 FAN SWITCH (HIGH)
317	14	ORANGE/WHITE	CON #8, PIN 20, OVERHEAD FAN #1 (FEED +12V)
318	14	YELLOW/BLACK	CON #8, PIN 21, BOOSTER HEAT PUMP POWER OUT
319	14	BLUE/BLACK	CON #8, PIN 23, OVERHEAD FAN #2 SWITCH (FEED +12V)
320	14	YELLOW/BLACK	CON #9, PIN 1, STEPWELL HEATER (+12V)
321	14	WHITE	CON #9, PIN 5, DRIVER'S HEATER (+12V)
322	14	BROWN	CON #13, PIN 16, SPARE
323	14	YELLOW	CON #10, PIN 1, UNDERSEAT HEATER (+12V)
324	14	ORANGE	CON #10, PIN 2, UNDERSEAT HEATER (+12V)
325	14	YELLOW/BLACK	CON #13, PIN 11, SPARE
326	14	BROWN/BLACK	CON #11, PIN 1, LIGHT DIMMER (POWER IN)
327	14	ORANGE/BLACK	CON #11, PIN 2, REAR UNDERSEAT HEATER
328	14	RED	CON #11, PIN 4, LIGHT DIMMER GROUND
329	14	GREEN	CON #12, PIN 1, RIGHT SIDE DEFROSTER
330	14	WHITE	CON #12, PIN 2, LEFT SIDE DEFROSTER
331	14	RED/WHITE	CON #13, PIN 3, A/C CONTROL SWITCH FAN ONLY
332	14	RED/BLACK	CONN. #13, PIN 2, SPARE
333	14	BLUE	CONN. #13, PIN 4, LIGHT DIMMER POWER HEAT SWITCH (TB4)
334	14	BLUE/WHITE	CONN. #13, PIN 5, LIGHT DIMMER GROUND HEAT SWITCH (TB 2)
335	14	BLUE/BLACK	CON #13, PIN 6, LAMP DIMMER (+12 V. IN)
336	14	GREEN	CON #13, PIN 8, A/C CONTROL SWITCH PILOT LIGHT OUT
337	14	GREEN/WHITE	CON #13, PIN 9, A/C CONTROL SWITCH PILOT LIGHT (+12 V. IN)
338	14	GREEN/BLACK	CON #13, PIN 10, LAMP DIMMER GND (TB5)
339	14	BROWN	CON #13, PIN 12, T2 A/C POWER SWITCH PILOT LIGHT OUT
340	14	BROWN/WHITE	CON #13, PIN 13, T2 A/C POWER SWITCH (TO CONTROLS OUT)
341	14	BROWN/BLACK	CON #13, PIN 14, LAMP DIMMER LOAD OUT (TB 4)
342	14	YELLOW	CON #13, PIN 15, T2 A/C POWER SWITCH (+ 12 V IN)
343	16	BLUE	HEADLIGHT RELAY (B7A) TO FOG LIGHTS
344	14	RED	DOOR POWER SWITCH TO L51
345	14	BLUE	L51 TO R5 RELAY (B5)
346	14	BROWN	R4 RELAY (B7) TO REAR DOOR OPEN MAG VALVE
347	14	ORANGE	R3 RELAY (B7) TO EXIT DOOR UNLOCK SOLENOID
348	14	YELLOW	S POSITION DOOR SWITCH DECK NO. 2 (B) R3 RELAY (B5)
349	14	WHITE	CON #8, PIN 2, MARKER LT. SWITCH (REAR)
350	14	WHITE	CON #8, PIN 3, MARKER LT. SWITCH (FRNT)

CIR	GA	COLOR	DESCRIPTION
351	14	GREEN	CON #8, PIN 5, SPARE
352	14	YELLOW	CON #8, PIN 22, WINDSHIELD DEFROST FAN SWITCH #1 (LOW)
353	14	YELLOW/BLACK	CON #8, PIN 24, WINDSHIELD DEFROST FAN SWITCH #1 (HIGH)
354	14	ORANGE/BLACK	CON #8, PIN 25, WINDSHIELD DEFROST FAN SWITCH #2 (LOW)
355	14	RED/BLACK	CON #8, PIN 26, WINDSHIELD DEFROST FAN SWITCH #2 (HIGH)
356	14	BLACK	CON #13, PIN 7, A/C CONTROL SWITCH A/C/ & FAN)
357	16	PINK	SWITCH CABINET JUMPERS
358	16	ORANGE	SWITCH CABINET JUMPERS
359	1	BLACK	BATTERY (-) TO EXTERNAL JUMP START BUTTON
360	1	BLACK	BATTERY (-) TO EXTERNAL JUMP START BUTTON
361	14	BLACK	S POSITION DOOR SWITCH DECK NO. 2 TO L52
362	14	GREEN	L52 TO R4 RELAY (B5)
363	14	BLACK/WHITE	BOOSTER PUMP FEED
364	14	ORANGE	DRIVERS UNDERSEAT HEATER FEED
365	14	BROWN	LEFT SIDE DEFROSTER FEED
366	14	BROWN/WHITE	RIGHT SIDE DEFROSTER FEED
367	14	YELLOW	SIGN SWITCH FEED
368	14	YELLOW/BLACK	INTERIOR LIGHT FEED
369	14	BLACK	R5 RELAY (B7) & R6 RELAY (B7) TO BRAKE OVERRIDE SW
370	14	WHITE	R1 RELAY (B5) TO MORSE SHIFTER (CIRC #B7)
371	14	BLUE/WHITE	R2 RELAY (B7) TO FRONT DOOR SOLENOID VALVE
372	14	BROWN/WHITE	S POS DOOR SW DECK NO. 1 (B) TO R2 & R6 RELAYS
373	14	GREEN	GROUND FOR DOOR RELAYS (B6)
374	16	YELLOW	START SW PT LIGHT TO STOP ARM RELAY (30)
375	16	BROWN	STOP ARM SWITCH TO STOP ARM RELAY (B6)
376	4	RED	CNTRL PANEL JUNCT. BLK. #1 TO ALT #2
377	4	RED	CNTRL PANEL JUNCTION BLOCK #5 TO ALT #1
378	4	BLACK	CNTRL PANEL GROUND STUD TO ALT GND STUD
379	8	WHITE	CNTRL PANEL TERM ST #7 TO CB ON REAR PANEL
380	14	RED	CNTRL PANEL TERM ST #3 TO ALT #1
381	14	WHITE	CNTRL PANEL TERM ST #6 TO AIR SOLENOID
382	14	BLACK	CNTRL PANEL TERM ST #4 TO ALT #2
383	4	RED	EVAP PANEL JB #7 TO CONDENSOR PANEL GND
384	8	WHITE	EVAP PANEL JB #6 TO CONTROL PANEL JB #6
385	8	GREEN	EVAP PANEL JB #4 TO CONTROL PANEL JB #4
386	16	BLUE	STOP ARM SOLENOID
387	14	BROWN	LEFT WIPER FEED - VISTA
388	14	TAN	RIGHT WIPER FEED - VISTA
389	14	BROWN/WHITE	LEFT WIPER SWITCH TO LEFT WIPER
390	14	TAN/WHITE	RIGHT WIPER SWITCH TO RIGHT WIPER
391	16	WHITE/BLACK	BACK LIGHTED LABEL LIGHTS
392	12	BLACK/WHITE	INTERIOR LIGHTS
393	8	RED	CHASSIS RELAY TO BODY RELAY (RHID)
394	16	BLUE	DOOR SWITCH RELAY (B7) TO GROUND
395	16	DK GREEN	COWL MOUNTED RIGHT TURN SIGNAL LIGHT
396	12	RED	WTHR PACK CON (POS B) TO POS TERM ON BATT
397	12	BROWN	WTHR PACK CON (POS A) TO NEG TERM ON BATT
398	12	RED	WTHR PACK CON (POS. A) TO 72 HR. POS 1 TIMER (RD) AMP CON POS 1 TO ON-OFF SW
399	12	BLACK	WTHR PACK CON (POS. B) TO ON-OFF SWITCH
400	14	YELLOW	WTHR PACK CON (POS. C) TO 72 HR. TIMER (YE) AMP CONN. POS. 2
401	14	GREEN	WEATHER PACK CONN. (POS. D) TO ON-OFF SWITCH INDICATOR LIGHT (+12V)
402	14	BLUE	WEATHER PACK CONN. (POS. E) TO ON-OFF SWITCH INDICATOR LIGHT (GND)
403	14	BROWN	WEATHER PACK CONN. (POS. F) TO 72 HR. TIMER (BR) AMP CON. POS 3
404	16	GREEN/WHITE	MASTER SW., OVERRIDE SW., START SW., GROUND JUMPER CHAIN
405	16	WHITE/BLACK	PILOT LT. RELAY TO DOOR SWITCH RELAY (30)
406	16	ORANGE/WHITE	PILOT LT. RELAY TO DOOR SWITCH RELAY (B5)
407	14	BLACK	FOOTWARMER (HIGH)
408	14	WHITE	FOOTWARMER (LOW)
409	16	GREEN/WHITE	MASTER SW., OVERRIDE SW., START SW., GROUND JUMPER CHAIN

CIR	GA	COLOR	DESCRIPTION
410	16	WHITE/BLACK	PILOT LT. RELAY TO DOOR SWITCH RELAY (30)
411	16	ORANGE	PILOT LT. RELAY (COIL) TO DOOR SWITCH RELAY (B5)
412	16	RED	MASTER SW. RELAY (B6) TO START SW. (3)
413	16	RED	START SW. (3) TO STOP SIGN FLASHER
414	16	RED	STOP SIGN FLASHER TO STOP SIGN SOLENOID
415	16	WHITE	MASTER SW. TO START SW. RELAY (B6) RELAY (B6)
416	16	GREEN	MASTER SW. RELAY (B6) TO START SW. (1)
417	16	GREEN	START SW. (1) TO START SW. RELAY (B7A)
418	16	YELLOW	MASTER SW. RELAY (B6) TO GND
419	16	YELLOW	START SW. RELAY (B5) TO GND
420	16	GREEN	START SW. RELAY (30) TO START SW. TERM. ON FLASHER
421	16	BLUE	START SW. (5) TO GROUND
422	16	RED	START SW. (6) TO DOOR SW. TERM. ON FLASHER
423	16	BLACK	START SW. (2) TO MASTER SW.
424	16	BLACK	MASTER SW. TO MASTER SW. RELAY (B7)
425	16	BLACK	MASTER SW. RELAY (30) TO MASTER SW. TERM ON FLASHER
426	14	BLACK	DOOR CONTROLLER (OPEN)
427	14	WHITE	DOOR CONTROLLER (CLOSE)
428	14	BLUE	ELECTRIC DOOR SWITCH FEED
429	14	DARK BLUE	ELECTRIC DOOR SWITCH GROUND
430	16	RED	DOOR AIR PRESS SWITCH TO DOOR RELAY (30)
431	16	WHITE	DOOR RELAY (30) TO DOOR RELAY (B5) TO OVERRIDE RELAY (B6) TO GROUND
432	16	BLUE	DOOR AIR PRESS. SWITCH TO DOOR RELAY (B7)
433	16	BLUE	ACTIVATION SWITCH ("OVERRIDE" SWITCH) TO LATCH RELAY (GROUND SIGNAL)
433A	16	BLUE	LATCH RELAY GROUND SIGNAL TO WARNING LIGHT FLASHER DOOR TERM
434	14	BLACK	ELECTRIC VANDALOCK (FUSE TO KEYSWITCH)
435	14	WHITE	ELECTRIC VANDALOCK (KEYSWITCH TO MOTOR)
436	14	GREEN	ELECTRIC VANDALOCK (FUSE TO MOTOR)
437	16	RED	DOOR SWITCH ON FLASHER TO FAIL-SAFE SW.
438	16	GREEN	FAIL-SAFE SWITCH TO GROUND
439	16	YELLOW	OVERRIDE SWITCH TO OVERRIDE RELAY (B7 AND B5) TO DOOR RELAY (B6)
440	16	GREEN	OVERRIDE SWITCH TO OVERRIDE RELAY (30)
441	16	GREEN	NC AIR SWITCH TO LATCH RELAY (B6) (MANUAL ACTIVATION ("OVERRIDE") SWITCH)
442	16	BLACK	OVERRIDE AIR PRESSURE SWITCH TO +12V (HOT) (MANUAL ACTIVATION SYS. POWER FEED)
443	16	BLUE	STOP SIGN (WALK GATE) TO CONTROLLER OR ACTIVATING SWITCH
444	16	WHITE	STOP SIGN (WALK GATE) TO GROUND
445	16	WHITE/BLACK	3 POSITION SWITCH (1) TO MASTER SWITCH TERMINAL OF FLASHER
446	16	WHITE/BLACK	MASTER SWITCH TERMINAL OF FLASHER TO START SWITCH TERMINAL OF FLASHER
447	16	GREEN	START SWITCH TERMINAL OF FLASHER TO DOOR SWITCH RELAY (B7)
448	16	WHITE	RELAY (B7) TO CHIME (STOP ARM OVERRIDE)FF
449	16	RED	RADIO ACCESSORY POWER
450	16	BLACK	CHIME RELAY (B6) TO CHIME



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CHART - CIRCUIT,  
ELECTRICAL (BODY)



CIR	GA	COLOR	DESCRIPTION
451	16	WHITE	RESET SWITCH TO SWITCH RELAY (85 & 87) TO CHIME RELAY (87)
452	16	RED	RESET SWITCH TO SWITCH RELAY (30) TO CHIME RELAY (30)
453	16	GREEN	RESET SWITCH TO FUSE PANEL (+12 V.)
454	16	GREEN	RESET SWITCH TO CHIME RELAY (85)
455	16	GREEN	RESET SWITCH TO CHIME
456	16	BLUE	SWITCH RELAY (85) TO GROUND
457	16	DARK GREEN	RIGHT COWL MOUNTED TURN SIGNAL
458	16	ORANGE	STARTER INTERRUPT
459	16	ORANGE/BLACK	STARTER INTERRUPT
460	10	RED	FUSE PANEL TO FLASHER MOTOR
461	10	BLUE	FUSE PANEL TO RELAY
462	18	GRAY	RIGHT FRONT SPEAKER (+)
463	16	BLACK	RADIO GROUND
464	18	GRAY/BLACK	RIGHT FRONT SPEAKER (-)
465	18	WHITE	LEFT FRONT SPEAKER (+)
466	18	WHITE/BLACK	LEFT FRONT SPEAKER (-)
467	---	---	---
468	16	ORANGE	L.S. HEATED MIRROR
469	16	BLUE	R.S. HEATED MIRROR
470	12	GREEN	PUSHER HEATER GROUND
471	12	GREEN	F.C. HEATER GROUND, DEFROSTER
472	12	GREEN	F.C. HEATER GROUND, STEP
473	12	RED	F.C. HEATER, DEFROSTER, HIGH
474	12	YELLOW	F.C. HEATER, STEP, HIGH
475	14	BROWN	F.C. HEATER, DEFROSTER, LOW
476	14	WHITE	F.C. HEATER, STEP, LOW
477	16	BLACK	HEATER PILOT LIGHT
478	16	GREEN	HEATER PILOT LIGHT GROUND
479	14	RED/BLACK	DEFROSTER HIGH CONTROL
480	14	YELLOW/WHITE	STEP HEAT HIGH CONTROL
481	16	BLACK	PANEL LIGHT JUMPER
482	16	GREEN	PANEL LIGHT GROUND JUMPER
483	8	RED	JUMPER, SOLENOID-TO-HOT FUSE BLOCK
484	2	RED	JUMPER, CHASSIS SOLENOID-TO-TERM. POST
485	4	RED	JUMPER, TERM. POST-TO-SOLENOIDS
486	4	RED	JUMPER, SOLENOID COLD-TO-FUSE BLOCKS
487	16	GREEN/BLACK	INTERMITTENT WIPER/S.C. HEADLIGHT
488	16	RED/BLACK	INTERLOCK FEED
489	16	ORANGE/WHITE	INTERMITTENT WIPER/S.C. HEADLIGHT
490	16	RED	INTERLOCK FEED
491	16	GREEN	ADDITIONAL SIDE DOOR BUZZER GROUND
492	16	BLACK	REAR STOP SIGN FEED
493	16	WHITE	REAR STOP SIGN SOLENOID
494	16	BROWN	REAR STOP SIGN PILOT LIGHT
495	12	BLACK	REAR STOP SIGN PILOT LIGHT
496	12	ORANGE	DOOR LIGHT FEED
497	12	BLUE	WARNING LIGHT MONITOR FEED (RED)
498	12	RED	WARNING LIGHT MONITOR FEED (RED)
499	12	WHITE	WARNING LIGHT MONITOR FEED (AMBER)
500	12	WHITE	WARNING LIGHT MONITOR FEED (AMBER)
			BOOSTER PUMP SWITCH FEED
			INTERIOR LIGHT SWITCH FEED

CIR	GA	COLOR	DESCRIPTION
501	16	WHITE	EMERGENCY EXIT PILOT LIGHT GROUND
502	16	YELLOW	BUZZER FEED
503	12	WHITE	MARKER LIGHT SWITCH FEED
504	16	RED	AIR HORN
505	12	WHITE	REAR HEATER SWITCH FEED
506	12	WHITE	REAR HEATER SWITCH FEED
507	16	WHITE	EMERGENCY EXIT PILOT LIGHT FEED
508	16	WHITE	COMPARTMENT LIGHT SWITCH FEED
509	14	RED	WARNING SYSTEM POWER FEED
509A	14	RED	POWER FEED TO FLASHER
509C	14	RED	POWER FEED TO LATCH RELAY (WARN SYS)
510	16	RED/BLACK	OVERRIDE SWITCH TO DOOR SWITCH
511	16	RED/GREEN	TERMINAL ON WARNING SYSTEM FLASHER
512	16	WHITE	LATCH RELAY COIL TO DE-LATCH RELAY
513	16	RED/BLACK	N.C. TERM
514	16	GREEN/BLACK	WARNING SYSTEM GROUND
515	16	YELLOW/BLACK	DOOR SWITCH TO DE-LATCH RELAY & DIODE
516	16	RED	RIGHT COWL MOUNTED WARNING LIGHT
517	16	WHITE	LEFT COWL MOUNTED WARNING LIGHT
518	16	GREEN	BODE SIDE EXIT DOOR SWITCHES
519	16	BLACK	BODE SIDE EXIT DOOR SWITCHES
520	16	WHITE	BODE SIDE EXIT DOOR SWITCHES
521	16	WHITE/BLUE	(SED) STEPWELL LIGHT (STANDARD)
522	16	ORANGE	(SED) STEPWELL LIGHT (CONT STEPWELL ILLUM)
523	14	RED	MIRAGE LIFT
524	14	WHITE	DUAL CHIME SYSTEM POWER
525	16	YELLOW/WHITE	DUAL CHIME SYSTEM GROUND
526	16	RED	DUAL CHIME SYSTEM DOOR SIGNAL
527	16	YELLOW/WHITE	DUAL CHIME SYSTEM CHIME SIGNAL (TO TIMER)
528	16	YELLOW/BLACK	DUAL CHIME SYSTEM NON ADA STOP REQ SIG
529	16	BLUE	DUAL CHIME SYSTEM ADA STOP REQ SIG
530	14	RED	DUAL CHIME SYSTEM NON-ADA PILOT
531	16	RED	DUAL CHIME SYSTEM ADA PILOT
532	14	ORANGE	DUAL CHIME SYSTEM LIFT DOOR SIGNAL
533	14	BLACK	READING LIGHT POWER
534	16	WHITE	READING LIGHT GROUND
535	14	RED	DOOR INHIBIT GROUND
536	14	RED	DOOR INHIBIT POWER FEED
537	14	YELLOW	T2 AC UNIT (AUTO)
538	14	ORANGE	T2 AC UNIT (COOL)
539	14	GREEN/BLACK	T2 AC UNIT (HEAT)
540	14	GREEN/WHITE	T2 AC UNIT (VENT)
541	14	GREEN	T2 AC UNIT (FAN SPEED)
542	14	BLUE	T2 AC UNIT (DRIVER'S DEFROST)
543	14	BLUE/BLACK	T2 AC UNIT (WATER TEMPERATURE)
544	14	BLUE/WHITE	T2 AC UNIT (BOOST PUMP)
545	14	ORANGE/WHITE	T2 AC UNIT (AC FAILURE LIGHT)
546	16	YELLOW	T2 AC UNIT COOLANT VALVE
547	12	RED	24 V ALT IGN WIRE
547A	14	RED	FUSE PANEL (BATT.) TO SPLICE A
547B	14	RED	SPLICE A TO CONN. 2, PIN 2
547C	12	RED	SPLICE A TO CONN. 1, PIN A
547D	14	RED	SPLICE A TO SPLICE B
			SPLICE B TO CONN. 2, PIN 6

CIR	GA	COLOR	DESCRIPTION
547E	12	RED	SPLICE B TO SPLICE C
547F	14	RED	SPLICE C TO CONN. 1, PIN E
547G	14	RED	SPLICE C TO CONN. 1, PIN F
548	14	ORANGE	FUSE PANEL (ACCY) TO CONN. 2, PIN 4
549	12	BROWN	GROUND TO SPLICE D
549A	14	BROWN	SPLICE D TO CONN. 2, PIN 5
549B	12	BROWN	SPLICE D TO SPLICE E TO SPLICE F
549C	14	BROWN	SPLICE E TO CONN. 1, PIN J
549D	14	BROWN	SPLICE F TO CONN. 1, PIN 0
549E	14	BROWN	SPLICE F TO CONN. 1, PIN H
550	14	GREEN	CONN. 2 PIN 3 TO CONN. 1, PIN C
551	14	BLACK	CONN. 2 PIN 7 TO CONN. 1, PIN B
552	16	WH/BK	PANEL LIGHTS TO CONN. 2, PIN 8
553	14	WHITE (YELLOW)	HEATED MIRROR + 12V (FAN POWER)
554	16	GREEN	HEATED MIRROR GROUND
555	16	BLUE	GROUND SIGNAL TO WARNING SYS FLASHER
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575	18	RED	FROM SP1 (-) TO SP3 (+)
576	18	ORANGE	FROM SP2 (-) TO SP4 (+)
577	18	BLUE	FROM SP5 (-) TO SP7 (+)
578	18	YELLOW	FROM SP6 (-) TO SP8 (+)
579	2	RED	BRAUN LIFT 12 V BATT POWER
580	12	RED	BRAUN LIFT TBB SOLN COIL PWR (COLD IGN)
581	12	BLACK	BRAUN LIFT TBB SOLN GND
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CHART - CIRCUIT,  
ELECTRICAL (BODY)

CIR	GA	COLOR	DESCRIPTION	CIR	GA	COLOR	DESCRIPTION	CIR	GA	COLOR	DESCRIPTION
600	---	---	---	659	---	---	---	600	16	BLACK	COMMON GROUND
601	---	---	---	660	---	---	---	601	14	YELLOW	STOP REQUEST
602	---	---	---	661	---	---	---	602	16	YELLOW	TIMEDELAY TO FRT. & REAR DOOR MOTORS
603	---	---	---	662	---	---	---	603	16	BLUE	T.B. TO DOOR VLV TO W/C
604	---	---	---	663	---	---	---	604	16	ORANGE	EXTRA WIRE
605	---	---	---	664	---	---	---	605	16	GREEN	EXTRA WIRE
606	---	---	---	665	---	---	---	606	16	BLUE	EXTRA WIRE
607	---	---	---	666	---	---	---	607	16	YELLOW	EXTRA WIRE
608	---	---	---	667	---	---	---	608	16	BLACK	EXTRA WIRE
609	---	---	---	668	---	---	---	609	16	WHITE	SIDE EXIT DOOR
610	---	---	---	669	---	---	---	610	16	RED/WHITE	SIDE EXIT DOOR
611	---	---	---	670	---	---	---	611	16	GREEN	SIDE EXIT DOOR
612	---	---	---	671	---	---	---	612	16	BLUE	SIDE EXIT DOOR
613	---	---	---	672	---	---	---	613	16	BLACK	SIDE EXIT DOOR
614	---	---	---	673	---	---	---	614	16	ORANGE	SIDE EXIT DOOR
615	---	---	---	674	---	---	---	615	16	GREEN	SIDE EXIT DOOR
616	---	---	---	675	---	---	---	616	16	ORANGE	SIDE EXIT DOOR
617	---	---	---	676	---	---	---	617	16	GREEN	SIDE EXIT DOOR
618	---	---	---	677	---	---	---	618	16	YELLOW	FRONT DOOR ALARM
619	---	---	---	678	---	---	---	619	16	ORANGE	SPEAKER (-) (CURB SIDE FRONT)
620	---	---	---	679	---	---	---	620	16	BLUE	SPEAKER (+) (CURB SIDE FRONT)
621	---	---	---	680	---	---	---	621	16	YELLOW	SPEAKER (-) (STREET SIDE FRONT)
622	---	---	---	681	---	---	---	622	16	GREEN	SPEAKER (+) (STREET SIDE FRONT)
623	---	---	---	682	---	---	---	623	16	YELLOW	SPEAKER JUMPER (CURB SIDE FRONT)
624	---	---	---	683	---	---	---	624	16	GREEN	SPEAKER JUMPER (CURB SIDE REAR)
625	---	---	---	684	---	---	---	625	16	ORANGE	SPEAKER JUMPER (STREET SIDE FRONT)
626	---	---	---	685	---	---	---	626	16	BLUE	SPEAKER JUMPER (STREET SIDE REAR)
627	---	---	---	686	---	---	---	627	16	ORANGE	SPEAKER (-) (CURB SIDE REAR)
628	---	---	---	687	---	---	---	628	16	BLUE	SPEAKER (+) (CURB SIDE REAR)
629	---	---	---	688	---	---	---	629	16	YELLOW	SPEAKER (-) (STREET SIDE REAR)
630	---	---	---	689	---	---	---	630	16	GREEN	SPEAKER (+) (STREET SIDE REAR)
631	---	---	---	690	---	---	---	---	---	---	---
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633	---	---	---	692	---	---	---	---	---	---	---
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658	---	---	---	717	---	---	---	---	---	---	---

SPACE EACH LINE .1750 FROM LINE ABOVE.  
ALIGN TEXT TO COLUMN ABOVE.


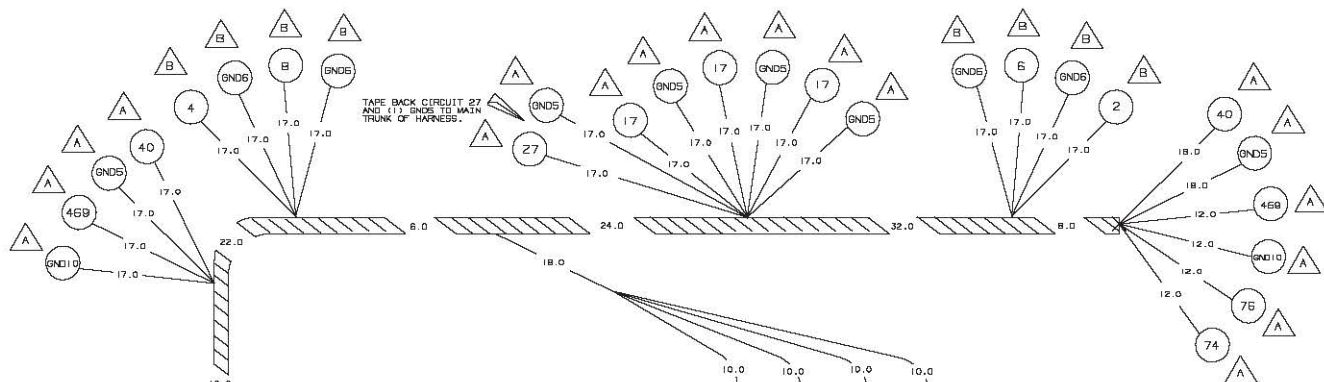

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CHART - CIRCUIT,  
ELECTRICAL (BODY)

**MAIN BODY  
SECTION**





CONN	VENDOR	PART #	DESCRIPTION
1	AMP	770030-1	15 POSITION CONNECTOR, CAP
	AMP	XX	14-16 GA TERMINAL, PIN
	AMP	XX	10-12 TERMINAL, PIN
2	AMP	770023-1	15 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA TERMINAL, RECEPT
	AMP	XX	10-12 GA TERMINAL, RECEPT
J1	AMP	640581-1	6 POS IN LINE CONN. (WHT)
	AMP	XX	TERMINAL 14-16 AWG SOCKET
J2	AMP	640585-1	6 POS IN LINE CONN. (NAT)
	AMP	XX	TERMINAL 14-16 AWG SOCKET
J3	AMP	640586-1	8 POS IN LINE CONN. (NAT)
	AMP	XX	TERMINAL 14-16 AWG SOCKET
J4	AMP	640582-1	8 POS IN LINE CONN. (WHT)
	AMP	XX	TERMINAL 14-16 AWG SOCKET
16	AMP	770022-1	12 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA TERMINAL, RECEPTICAL
	AMP	XX	10-12 TERMINAL, RECEPTICAL
17	AMP	770029-1	12 POSITION CONNECTOR, CAP
	AMP	XX	14-16 GA TERMINAL, PIN

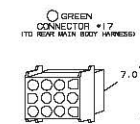
#### NOTES:

1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.
2. TAG HARNESS FOR IDENTIFICATION.
3. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
4. REFER TO DWG. 452001136 FOR HARNESS SPECIFICATIONS.
5. APPLY CONVOLUTE TUBING OF MINIMUM SIZE TO MAIN TRUNK OF ENTIRE HARNESS.
6. TAPE CONVOLUTE TO HARNESS AT ENDS.
7. FULLY TAPE HARNESS WHERE HEAVY LINES HAVE BEEN SHOWN.
8. DASHED LINES INDICATE CIRCUIT SPLICES.
9. SPIRAL TAPE ENTIRE HARNESS.
10. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.

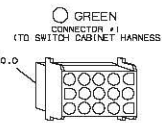
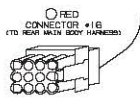
P/N 52003864 ONLY

\*\* HARNESS WITH CONVOLUTE IS: \*\*  
PART NUMBER: 52003864

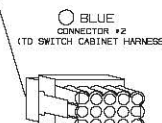
1	2	3
4	5	6
7	8	9
10	11	12
13	14	15
16	17	18



1	2	3
4	5	6
7	8	9
10	11	12
13	14	15
16	17	18



1	2	3
4	5	6
7	8	9
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13	14	15
16	17	18



1	2	3
4	5	6
7	8	9
10	11	12
13	14	15
16	17	18

CIR	GA	COLOR	DESCRIPTION	CIR	GA	COLOR	DESCRIPTION
1	12	BLACK	LEFT REAR WARNING LIGHT (RED)	74	18	BLACK	STEPLIGHT FEED.
2	12	BROWN	RIGHT FRONT WARNING LIGHT, RED.	76	18	BLACK/YELLOW	DOOR LIGHT FEED.
3	12	ORANGE	RIGHT REAR WARNING LIGHT (RED)	160	12	BLACK	LIGHT MONITOR FEED, RIGHT (RED).
4	12	YELLOW	LEFT FRONT WARNING LIGHT, RED.	162	12	ORANGE	LIGHT MONITOR FEED, LEFT (RED).
5	12	BLUE	LEFT REAR WARNING LIGHT (AMBER)	164	12	BLUE	LIGHT MONITOR FEED, RIGHT (AMBER).
6	12	WHITE	RIGHT FRONT WARNING LIGHT, AMBER.	166	12	RED	LIGHT MONITOR FEED, LEFT (AMBER).
7	12	RED	RIGHT REAR WARNING LIGHT (AMBER)	168	14	BROWN	LIGHT MONITOR FEED, TAIL LIGHTS.
8	12	GREEN	LEFT FRONT WARNING LIGHT, AMBER.	170	14	BLUE/WHITE	LIGHT MONITOR FEED, REVERSE LIGHTS.
9	16	DARK GREEN	RIGHT TURN SIGNAL (REAR & FRONT SIDE)	172	16	RED	LIGHT MONITOR FEED, BRAKE LIGHTS.
10	16	YELLOW	LEFT TURN SIGNAL (REAR & FRONT SIDE)	174	16	YELLOW	LIGHT MONITOR FEED, LEFT TURN SIGNAL.
11	16	BROWN	RIGHT TAIL LIGHT	176	16	DARK GREEN	LIGHT MONITOR FEED, RIGHT TURN SIGNAL.
12	16	BROWN/WHITE	LEFT TAIL LIGHT	176	16	BLACK	LIGHT MONITOR POS. FEED.
13	16	BLUE	RIGHT BACK-UP LIGHT	469	14	BLUE	HEATED MIRROR PWR. FEED (+), CAB MOUNTED.
14	16	BLUE/WHITE	LEFT BACK-UP LIGHT	6ND	16	WHITE	LIGHT MONITOR GROUND.
15	16	RED	RIGHT BRAKE LIGHT	6ND6	16	WHITE	FRONT CLEARANCE, MARKER LIGHT GROUNDS
16	16	RED/WHITE	LEFT BRAKE LIGHT	6ND6	12	WHITE	FRONT WARNING LIGHT GROUNDS.
17	16	BROWN	CLEARANCE LIGHTING	6ND10	14	WHITE	HEATED MIRROR GROUND.
21A	16	BLACK	INTERIOR LIGHT FEED (+), FRONT.	-	-	-	-
21B	16	BLACK/WHITE	INTERIOR LIGHT FEED (+), REAR.	-	-	-	-
27	16	WHITE/BLACK	FRONT DESTINATION SIGN.	-	-	-	-
29	16	DARK BLUE	REAR DOOR BUZZER (GND)	-	-	-	-
30	16	LIGHT BLUE	HATCH OR PUSH OUT BASH (GND SIGNAL TO BUZZER)	-	-	-	-
32	16	YELLOW	VANDALOCK (GND)	-	-	-	-
33	16	WHITE	BUZZER FEED (REAR & SIDE DOOR)	-	-	-	-
36	16	PURPLE/BLACK	STROBE LIGHT FEED	-	-	-	-
40	16	BROWN/WHITE	MARKER LIGHTS	-	-	-	-

PART	VENDOR	VENDOR P/N	DESCRIPTION
A	XX	XX	BUTT SPLICE, 14-16 GA., INSULATED
B	XX	XX	BUTT SPLICE 14-16 TO 10-12 GA., INS.



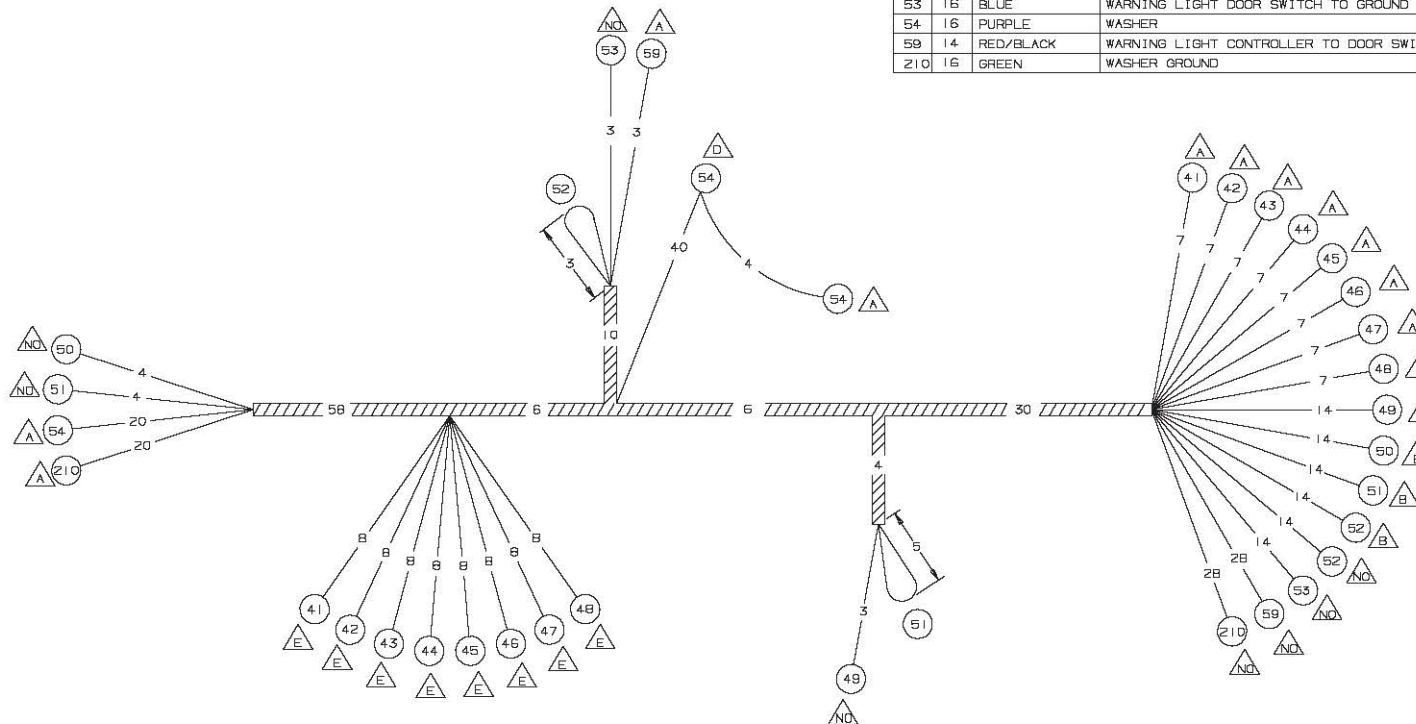
52003782 D

**HARNESS, MAIN BODY, FRONT**

Effective Date: 1/10/02  
End Date: 9/4/02



CIR	GA	COLOR	DESCRIPTION
41	14	GREEN/WHITE	DEFROSTER LEFT (LOW)
42	14	GREEN/BLACK	DEFROSTER LEFT (HIGH)
43	14	RED/WHITE	DEFROSTER RIGHT (LOW)
44	14	RED/BLACK	DEFROSTER RIGHT (HIGH)
45	14	BLUE	STEPWELL HEAT (LOW)
46	14	BLUE/WHITE	STEPWELL HEAT (HIGH)
47	14	YELLOW	DRIVER'S HEAT (LOW)
48	14	YELLOW/WHITE	DRIVER'S HEAT (HIGH)
49	16	YELLOW	FRONT LEFT TURN SIGNAL
50	16	DK. GREEN	FRONT RIGHT TURN SIGNAL
51	16	BROWN/WHITE	PARKING LIGHTS
52	16	BLUE/WHITE	STEPWELL LIGHT (DOOR SWITCH)
53	16	BLUE	WARNING LIGHT DOOR SWITCH TO GROUND
54	16	PURPLE	WASHER
59	14	RED/BLACK	WARNING LIGHT CONTROLLER TO DOOR SWITCH
210	16	GREEN	WASHER GROUND



E	MALE BLADE, 1/4", 14-16 AWG., FULLY INS.
D	FEMALE PUSH-ON, 1/4", 10-12 AWG.
C	RING TERMINAL, #10 STUD, 14-16 AWG.
B	SPRING SPADE, #10 STUD, 14-16 AWG.
A	FEMALE PUSH-ON, 1/4", 14-16 AWG.
TERM	DESCRIPTION


4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.

3. FULLY TAPE THIS HARNESS.

2. TAG HARNESS FOR IDENTIFICATION.

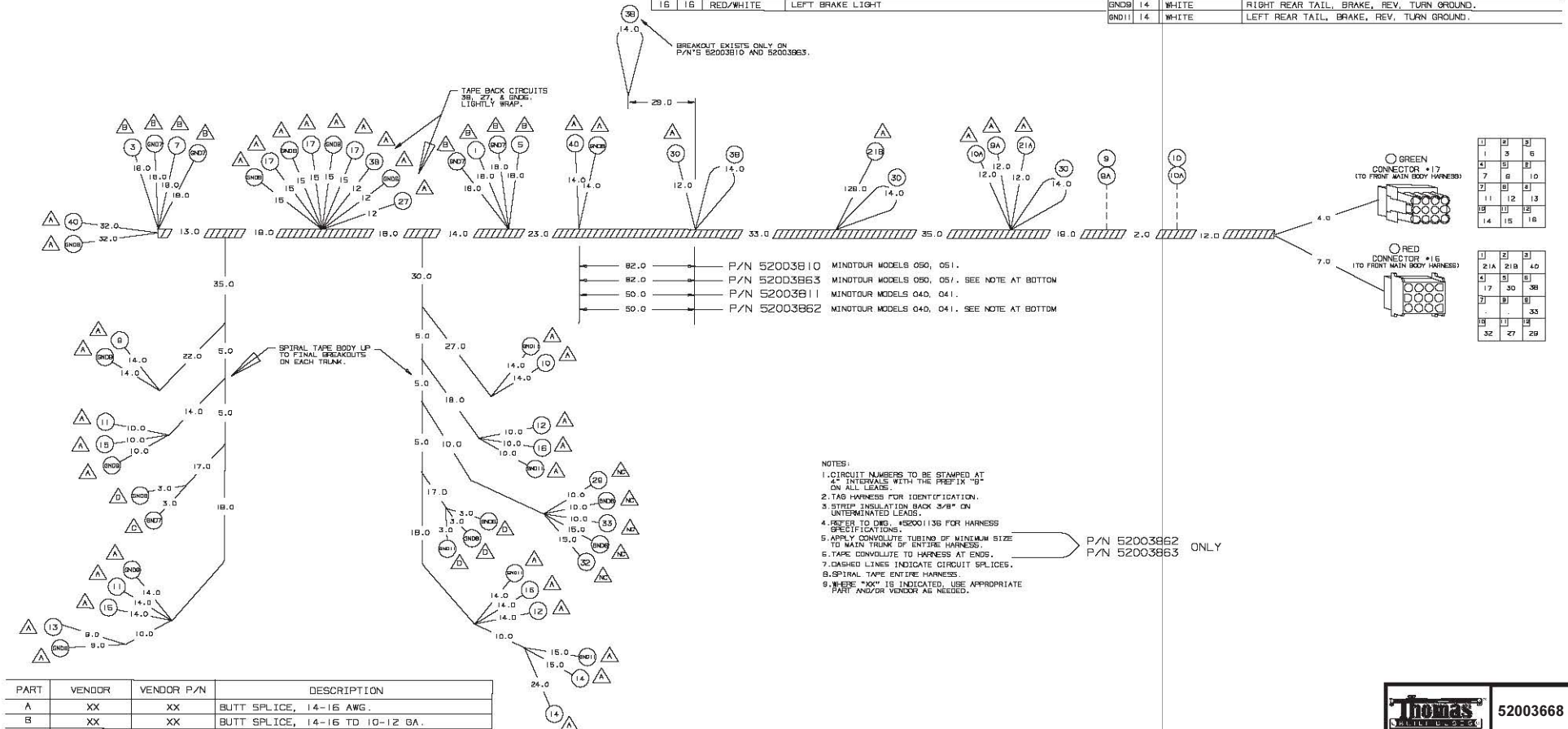
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.

NOTES:

	52000268 L
HARNESS, MAIN BODY FRONT	

CONN	VENDOR	PART #	DESCRIPTION
17	AMP	770022-1	12 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA TERMINAL, RECEPTICAL
	AMP	XX	10-12 TERMINAL, RECEPTICAL
16	AMP	770029-1	12 POSITION CONNECTOR, CAP
	AMP	XX	14-16 GA TERMINAL, PIN
	AMP	XX	10-12 TERMINAL, PIN

CIR	GA	COLOR	DESCRIPTION	CIR	GA	COLOR	DESCRIPTION
1	12	BLACK	LEFT REAR WARNING LIGHT (RED)	17	16	BROWN	CLEARANCE LIGHTING.
3	12	ORANGE	RIGHT REAR WARNING LIGHT (RED)	21A	16	BLACK	INTERIOR LIGHT FEED (+), FRONT.
5	12	BLUE	LEFT REAR WARNING LIGHT (AMBER)	21B	16	BLACK/WHITE	INTERIOR LIGHT FEED (+), REAR.
7	12	RED	RIGHT REAR WARNING LIGHT (AMBER)	29	16	DARK BLUE	REAR DOOR BUZZER (GND)
9	16	DARK GREEN	RIGHT TURN SIGNAL (REAR & FRONT SIDE)	27	15	WHITE/BLACK	DESTINATION SIGN. (2V+ FEED).
9A	16	DARK GREEN	RIGHT DIRECTIONAL LIGHT DROPOUT.	30	16	LIGHT BLUE	HATCH OR PUSH OUT SASH (GND SIGNAL TO BUZZER)
10	16	YELLOW	LEFT TURN SIGNAL (REAR & FRONT SIDE)	32	16	YELLOW	VANDALOCK (GND)
10A	16	YELLOW	LEFT DIRECTIONAL LIGHT DROPOUT.	33	15	WHITE	BUZZER FEED (REAR & SIDE DOOR)
11	16	BROWN	RIGHT TAIL LIGHT	38	16	PURPLE/BLACK	STROBE LIGHT FEED
12	16	BROWN/WHITE	LEFT TAIL LIGHT	40	16	BROWN/WHITE	MARKER LIGHTS
13	16	BLUE	RIGHT BACK-UP LIGHT	GNB5	14	WHITE	BUZZER, SIGN, DOOR SWITCH, AND STROBE GROUND CIRCUIT.
14	16	BLUE/WHITE	LEFT BACK-UP LIGHT	GN07	12	WHITE	WARNING LIGHT GROUND.
15	16	RED	RIGHT BRAKE LIGHT	GN09	14	WHITE	MARKER, CLEARANCE GROUNDS.
16	16	RED/WHITE	LEFT BRAKE LIGHT	GN09	14	WHITE	RIGHT REAR TAIL, BRAKE, REV. TURN GROUND.
				GN011	14	WHITE	LEFT REAR TAIL, BRAKE, REV. TURN GROUND.



PART	VENDOR	VENDOR P/N	DESCRIPTION
A	XX	XX	BUTT SPLICE, 14-16 AWG.
B	XX	XX	BUTT SPLICE, 14-16 TO 10-12 GA.
C	XX	XX	RING TERMINAL, 5/16" 10-12 GA.
D	XX	XX	RING TERMINAL, 5/16", 14-16 GA.
E	.	.	.
F	AMP	520974-2	10-14 GA, 1/4" ULTRA-POD
F	AMP	520963-2	14-18 GA, 1/4" ULTRA-POD
G	.	.	.

**52003668 E**

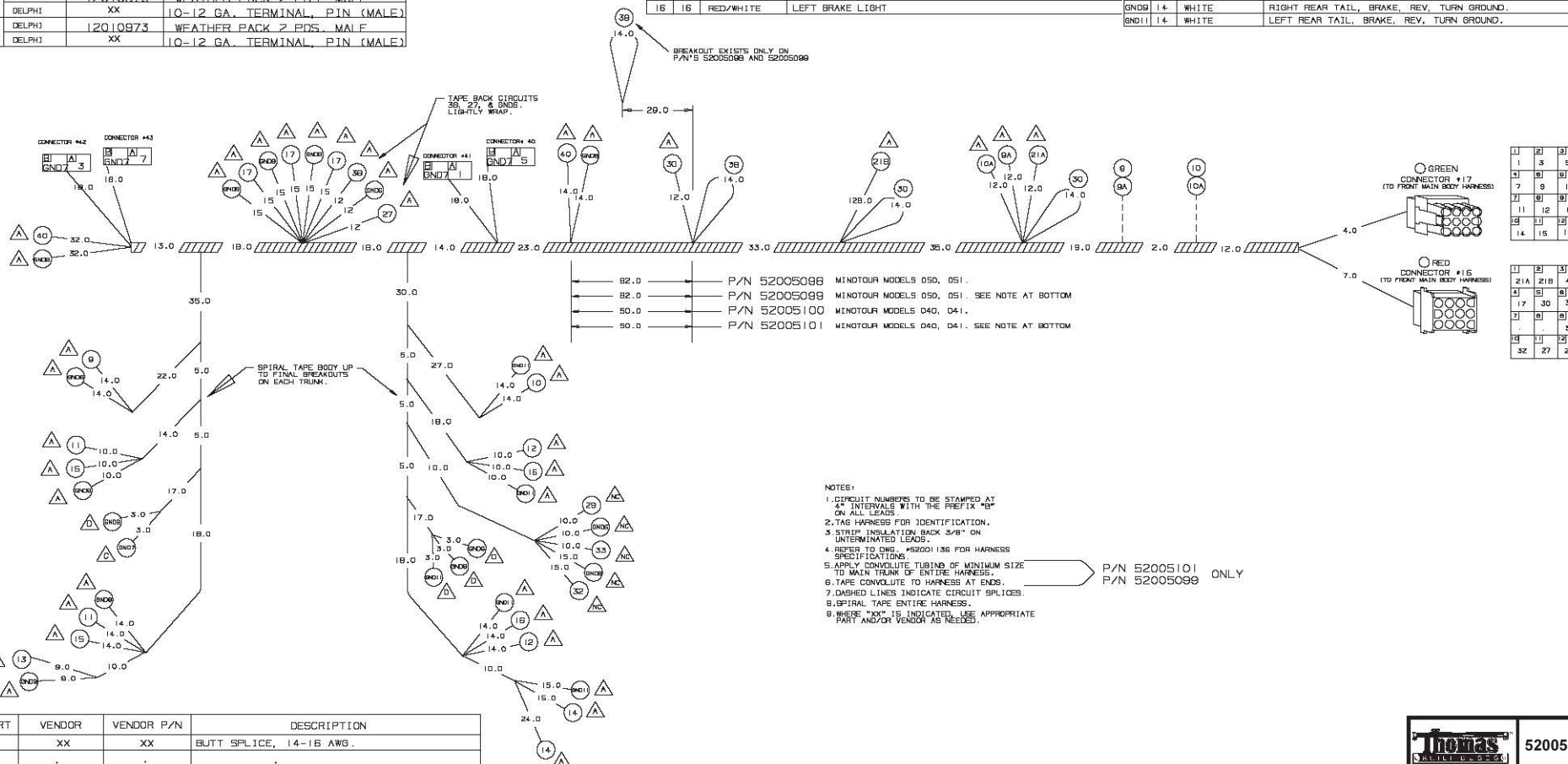
**HARNESS CHART, MAIN BODY, REAR**

End Date: 6/10/01



CONN	VENDOR	PART #	DESCRIPTION
17	AMP	770022-1	12 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA TERMINAL, RECEPTICAL
	AMP	XX	10-12 TERMINAL, RECEPTICAL
16	AMP	770029-1	12 POSITION CONNECTOR, CAP
	AMP	XX	14-16 GA TERMINAL, PIN
	AMP	XX	10-12 TERMINAL, PIN
40	DELPHI	12010973	WEATHER PACK 2 POS. MALE
	DELPHI	XX	10-12 GA. TERMINAL, PIN (MALE)
41	DELPHI	12010973	WEATHER PACK 2 POS. MALE
	DELPHI	XX	10-12 GA. TERMINAL, PIN (MALE)
42	DELPHI	12010973	WEATHER PACK 2 POS. MALE
	DELPHI	XX	10-12 GA. TERMINAL, PIN (MALE)
43	DELPHI	12010973	WEATHER PACK 2 POS. MALE
	DELPHI	XX	10-12 GA. TERMINAL, PIN (MALE)

CIR	GA	COLOR	DESCRIPTION	CIR	GA	COLOR	DESCRIPTION
1	12	BLACK	LEFT REAR WARNING LIGHT (RED)	17	16	BROWN	CLEARANCE LIGHTING.
3	12	ORANGE	RIGHT REAR WARNING LIGHT (RED)	21A	16	BLACK	INTERIOR LIGHT FEED (+), FRONT.
5	12	BLUE	LEFT REAR WARNING LIGHT (AMBER)	21B	16	BLACK/WHITE	INTERIOR LIGHT FEED (+), REAR.
7	12	RED	RIGHT REAR WARNING LIGHT (AMBER)	29	16	DARK BLUE	REAR DOOR BUZZER (GND)
9	16	DARK GREEN	RIGHT TURN SIGNAL (REAR & FRONT SIDE)	27	16	WHITE/BLACK	DESTINATION SIGN. 12V+ FEED.
9A	16	DARK GREEN	RIGHT DIRECTIONAL LIGHT DROPOUT.	30	16	LIGHT BLUE	HATCH OR PUSH OUT GASH (GND SIGNAL TO BUZZER)
10	16	YELLOW	LEFT TURN SIGNAL (REAR & FRONT SIDE)	32	16	YELLOW	VANDALOCK (GND)
10A	16	YELLOW	LEFT DIRECTIONAL LIGHT DROPOUT.	33	16	WHITE	BUZZER FEED (REAR & SIDE DOOR)
11	16	BROWN	RIGHT TAIL LIGHT	39	16	PURPLE/BLACK	STROBE LIGHT FEED
12	16	BROWN/WHITE	LEFT TAIL LIGHT	40	16	BROWN/WHITE	MARKER LIGHTS
13	16	BLUE	RIGHT BACK-UP LIGHT	GND6	14	WHITE	BUZZER, SIGN, DOOR SWITCH, AND STROBE GROUND CIRCUIT.
14	16	BLUE/WHITE	LEFT BACK-UP LIGHT	GND7	12	WHITE	WARNING LIGHT GROUND.
15	16	RED	RIGHT BRAKE LIGHT	GND8	14	WHITE	MARKER, CLEARANCE GROUNDS.
16	16	RED/WHITE	LEFT BRAKE LIGHT	GND9	14	WHITE	RIGHT REAR TAIL, BRAKE, REV, TURN GROUND.
				GND11	14	WHITE	LEFT REAR TAIL, BRAKE, REV, TURN GROUND.

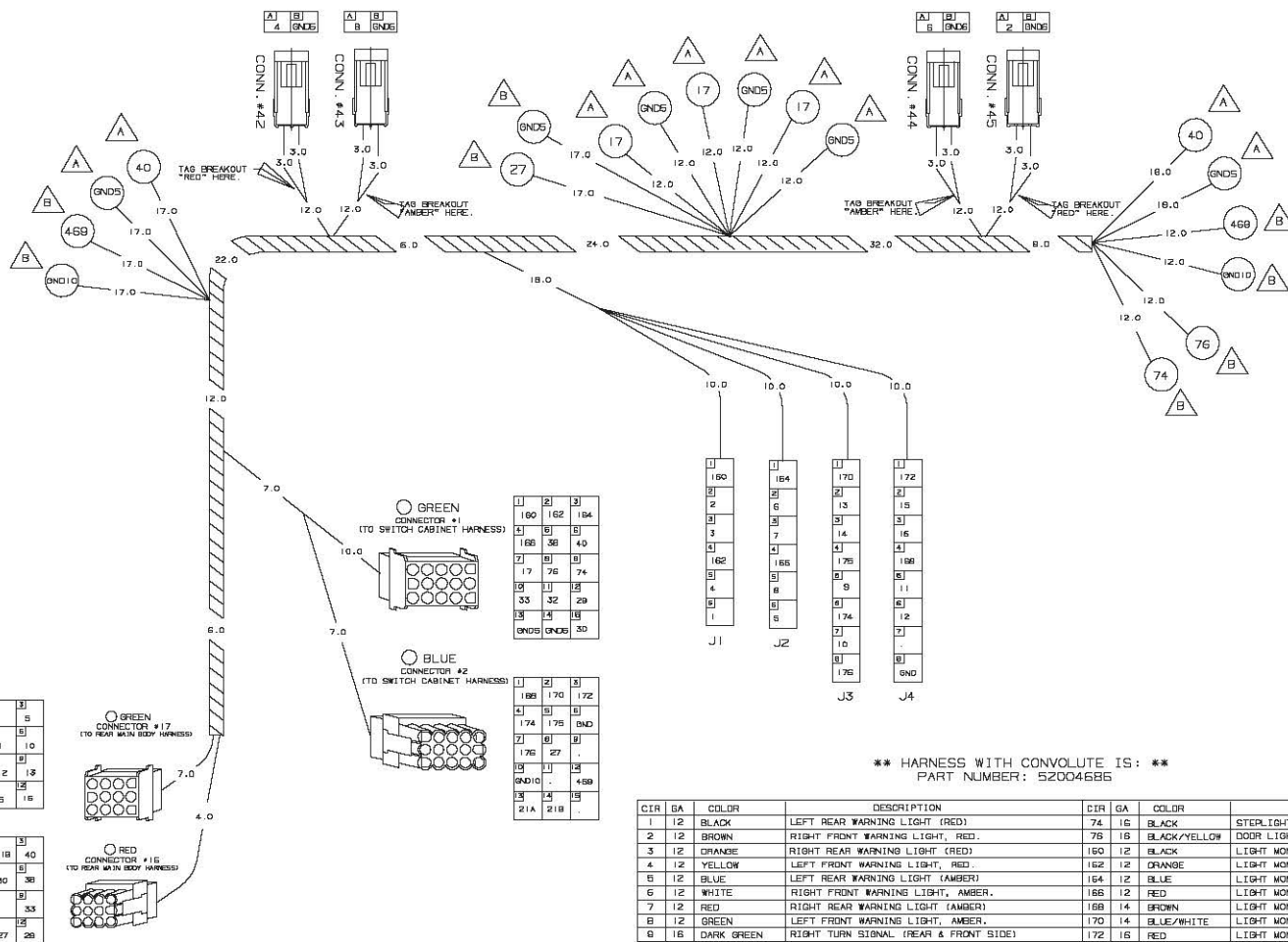


PART	VENDOR	VENDOR P/N	DESCRIPTION
A	XX	XX	BUTT SPLICE, 14-16 AWG.
B	XX	XX	RING TERMINAL, 5/16" 10-12 GA.
C	XX	XX	RING TERMINAL, 5/16" 14-16 GA.
D	XX	XX	RING TERMINAL, 5/16" 14-16 GA.
E	XX	XX	RING TERMINAL, 5/16" 14-16 GA.
F	AMP	520974-2	10-14 GA. 1/4" ULTRA-POD
G	AMP	520963-2	14-18 GA. 1/4" ULTRA-POD

**52005094 C**

**HARNESS, CHART, MAIN BODY, REAR**

Effective Date: 6/11/01  
 End Date: 9/4/02



CONN	VENDOR	PART #	DESCRIPTION
1	AMP	770030-1	15 POSITION CONNECTOR, CAP
	AMP	XX	14-16 GA TERMINAL, PIN
	AMP	XX	10-12 TERMINAL, PIN
2	AMP	770023-1	15 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA TERMINAL, RECEPT.
	AMP	XX	10-12 GA TERMINAL, RECEPT.
J1	AMP	6405B1-1	6 POS IN LINE CONN. (WHT)
	AMP	XX	TERMINAL 14-16 AWG SOCKET
J2	AMP	6405B5-1	6 POS IN LINE CONN. (NAT)
	AMP	XX	TERMINAL 14-16 AWG SOCKET
J3	AMP	6405B6-1	8 POS IN LINE CONN. (NAT)
	AMP	XX	TERMINAL 14-16 AWG SOCKET
J4	AMP	6405B2-1	8 POS IN LINE CONN. (WHT)
	AMP	XX	TERMINAL 14-16 AWG SOCKET
16	AMP	770022-1	12 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA TERMINAL, RECEPTICAL
	AMP	XX	10-12 TERMINAL, RECEPTICAL
17	AMP	770029-1	12 POSITION CONNECTOR, CAP
	AMP	XX	14-16 GA TERMINAL, PIN
	AMP	XX	10-12 TERMINAL, PIN
42-45	PACKARD	12010973	CONNECTOR-2 WAY SHROUD
	XX	XX	TERMINAL-MALE PIN
	XX	XX	CABLE SEAL

- NOTES:
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.
  2. TAG HARNESS FOR IDENTIFICATION.
  3. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
  4. REFER TO DIS. #52001136 FOR HARNESS SPECIFICATIONS.
  5. APPLY CONVOLUTE TUBING OF MINIMUM SIZE TO MAIN TRUNK OF ENTIRE HARNESS.
  6. TAPE CONVOLUTE TO HARNESS AT ENDS.
  7. SPIRAL TAPE ENTIRE BODY OF HARNESS.
  8. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
  9. WHERE "\*" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEEDED FOR TERMINATION.

P/N 52004685 ONLY

\*\* HARNESS WITH CONVOLUTE IS: \*\*  
PART NUMBER: 52004685

CIR	GA	COLOR	DESCRIPTION	CIR	GA	COLOR	DESCRIPTION
1	12	BLACK	LEFT REAR WARNING LIGHT (RED)	74	16	BLACK	STEPLIGHT FEED.
2	12	BROWN	RIGHT FRONT WARNING LIGHT, RED.	75	16	BLACK/YELLOW	DOOR LIGHT FEED.
3	12	ORANGE	RIGHT REAR WARNING LIGHT (RED)	160	12	BLACK	LIGHT MONITOR FEED, RIGHT (RED).
4	12	YELLOW	LEFT FRONT WARNING LIGHT, RED.	162	12	ORANGE	LIGHT MONITOR FEED, LEFT (RED).
5	12	BLUE	LEFT REAR WARNING LIGHT (AMBER)	164	12	BLUE	LIGHT MONITOR FEED, RIGHT (AMBER).
6	12	WHITE	RIGHT FRONT WARNING LIGHT, AMBER.	166	12	RED	LIGHT MONITOR FEED, LEFT (AMBER).
7	12	RED	RIGHT REAR WARNING LIGHT (AMBER)	168	14	BROWN	LIGHT MONITOR FEED, TAIL LIGHTS
8	12	GREEN	LEFT FRONT WARNING LIGHT, AMBER.	170	14	BLUE/WHITE	LIGHT MONITOR FEED, REVERSE LIGHTS.
9	16	DARK GREEN	RIGHT TURN SIGNAL (REAR & FRONT SIDE)	172	16	RED	LIGHT MONITOR FEED, BRAKE LIGHTS.
10	16	YELLOW	LEFT TURN SIGNAL (REAR & FRONT SIDE)	174	16	YELLOW	LIGHT MONITOR FEED, LEFT TURN SIGNAL.
11	16	BROWN	RIGHT TAIL LIGHT	176	16	DARK GREEN	LIGHT MONITOR FEED, RIGHT TURN SIGNAL.
12	16	BROWN/WHITE	LEFT TAIL LIGHT	176	16	BLACK	LIGHT MONITOR POS. FEED.
13	16	BLUE	RIGHT BACK-UP LIGHT	469	14	BLUE	HEATED MIRROR PWR. FEED (+), CAB MOUNTED.
14	16	BLUE/WHITE	LEFT BACK-UP LIGHT	GND	16	WHITE	LIGHT MONITOR GROUND.
15	16	RED	RIGHT BRAKE LIGHT	GND5	16	WHITE	FRONT CLEARANCE, MARKER LIGHT GROUNDS
16	16	RED/WHITE	LEFT BRAKE LIGHT	GND6	12	WHITE	FRONT CLEARANCE, MARKER LIGHT GROUNDS.
17	16	BROWN	CLEARANCE LIGHTING	GND10	14	WHITE	HEATED MIRROR GROUND.
21A	16	BLACK	INTERIOR LIGHT FEED (+), FRONT.	-	-	-	-
21B	16	BLACK/WHITE	INTERIOR LIGHT FEED (+), REAR.	-	-	-	-
27	16	WHITE/BLACK	FRONT DESTINATION SIGN.	-	-	-	-
29	16	DARK BLUE	REAR DOOR BUZZER (GND)	-	-	-	-
30	16	LIGHT BLUE	HATCH OR PUSH OUT SASH (GND SIGNAL TO BUZZER)	-	-	-	-
32	16	YELLOW	VANDALOCK (GND)	-	-	-	-
33	16	WHITE	BUZZER FEED (REAR & SIDE DOOR)	-	-	-	-
38	16	PURPLE/BLACK	STROBE LIGHT FEED	-	-	-	-
40	16	BROWN/WHITE	MARKER LIGHTS	-	-	-	-

PART	VENDOR	VENDOR P/N	DESCRIPTION
A	DEUTSCH	XX	14-16 GA. DT SERIES PIN CONTACT
B	XX	XX	BUTT SPLICE, 14-16 AWG. WITH SHRINKABLE INS.

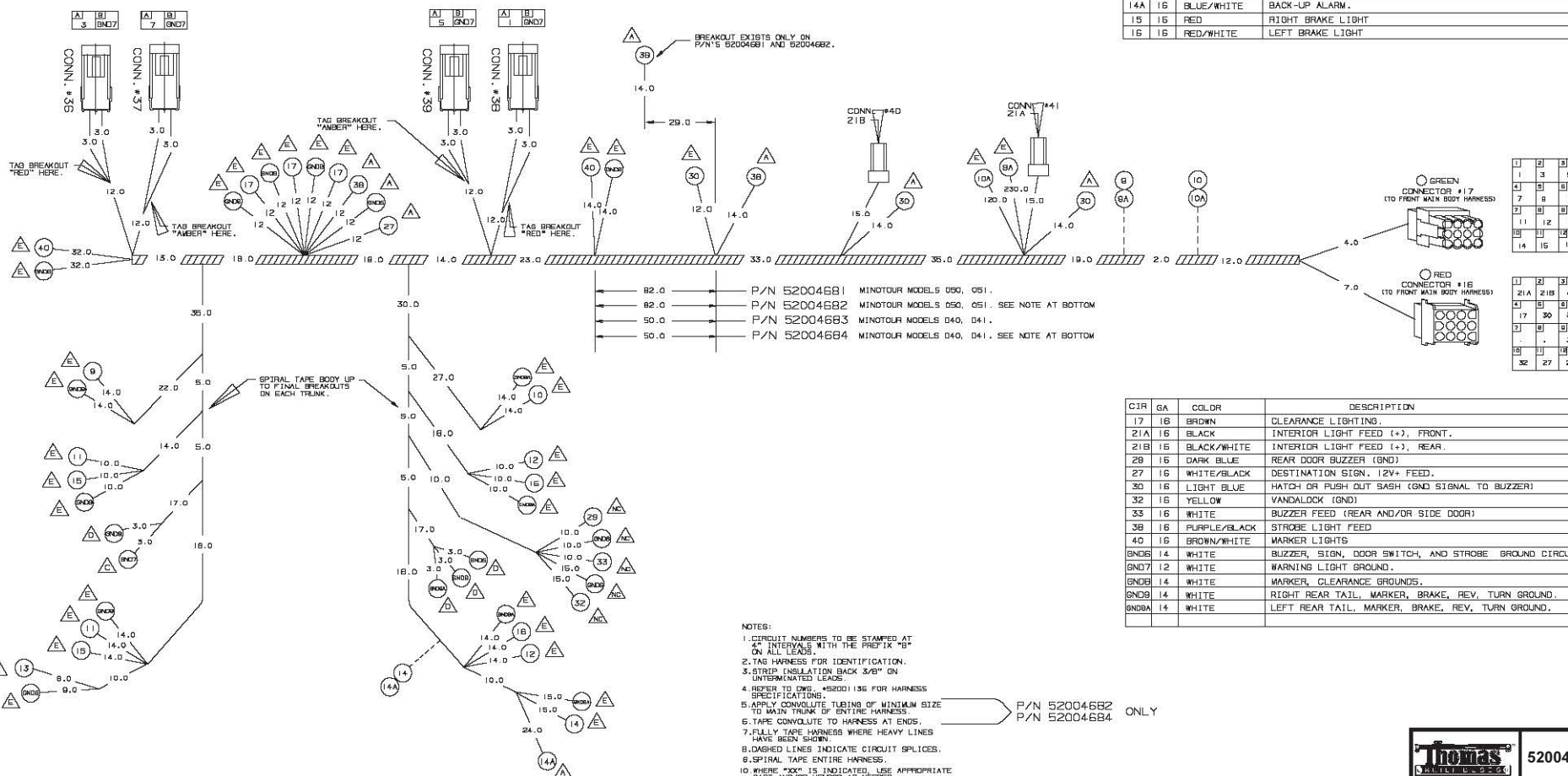
52004685 A

**HARNESS, MAIN BODY, FRONT (S. CAROLINA)**

CONN	VENDOR	PART #	DESCRIPTION
17	AMP	770022-1	12 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA TERMINAL, RECEPTICAL
	AMP	XX	10-12 TERMINAL, RECEPTICAL
16	AMP	770029-1	12 POSITION CONNECTOR, CAP
	AMP	XX	14-16 GA TERMINAL, PIN
	AMP	XX	10-12 TERMINAL, PIN

CONN	VENDOR	PART #	DESCRIPTION
36-39	PACKARD	12010973	CONNECTOR-2 WAY SHROUD
	XX	XX	TERMINAL-MALE PIN
	XX	XX	CABLE SEAL
40-41	AMP	174463-1	MULTILOCK CONN., 070 2P
	XX	XX	TERMINAL-FEMALE, TIN/BRONZE

CIR	GA	COLOR	DESCRIPTION
1	12	BLACK	LEFT REAR WARNING LIGHT (RED)
3	12	ORANGE	RIGHT REAR WARNING LIGHT (RED)
5	12	BLUE	LEFT REAR WARNING LIGHT (AMBER)
7	12	RED	RIGHT REAR WARNING LIGHT (AMBER)
9	16	DARK GREEN	RIGHT TURN SIGNAL (REAR & FRONT SIDE)
9A	16	DARK GREEN	RIGHT DIRECTIONAL LIGHT DROPOUT
10	16	YELLOW	LEFT TURN SIGNAL (REAR & FRONT SIDE)
10A	16	YELLOW	LEFT DIRECTIONAL LIGHT DROPOUT
11	16	BROWN	RIGHT TAIL LIGHT
12	16	BROWN/WHITE	LEFT TAIL LIGHT
13	16	BLUE	RIGHT BACK-UP LIGHT
14	16	BLUE/WHITE	LEFT BACK-UP LIGHT
14A	16	BLUE/WHITE	BACK-UP ALARM
15	16	RED	RIGHT BRAKE LIGHT
16	16	RED/WHITE	LEFT BRAKE LIGHT



PART	VENDOR	VENDOR P/N	DESCRIPTION
A	XX	XX	BUTT SPLICE, 14-16 AWG. WITH SHRINKABLE INS.
C	XX	XX	RING TERMINAL, 5/16\" 10-12 GA.
D	XX	XX	RING TERMINAL, 5/16\", 14-16 GA.
E	DEUTSCH	XX	14-16 GA. DT SERIES PIN CONTACT

CIR	GA	COLOR	DESCRIPTION
17	16	BROWN	CLEARANCE LIGHTING
21A	16	BLACK	INTERIOR LIGHT FEED (+), FRONT
21B	16	BLACK/WHITE	INTERIOR LIGHT FEED (+), REAR
28	16	DARK BLUE	REAR DOOR BUZZER (GND)
27	16	WHITE/BLACK	DESTINATION SIGN. 12V+ FEED
30	16	LIGHT BLUE	HATCH OR PUSH OUT SASH (GND SIGNAL TO BUZZER)
32	16	YELLOW	VANDALOCK (GND)
33	16	WHITE	BUZZER FEED (REAR AND/OR SIDE DOOR)
38	16	PURPLE/BLACK	STROBE LIGHT FEED
40	16	BROWN/WHITE	MARKER LIGHTS
6ND6	14	WHITE	BUZZER, SIGN. DOOR SWITCH, AND STROBE GROUND CIRCUIT
6ND7	12	WHITE	WARNING LIGHT GROUND
6ND8	14	WHITE	MARKER, CLEARANCE GROUNDS
6ND9	14	WHITE	RIGHT REAR TAIL, MARKER, BRAKE, REV. TURN GROUND
6NDA	14	WHITE	LEFT REAR TAIL, MARKER, BRAKE, REV. TURN GROUND

- NOTES:
1. CIRCUIT NUMBERS TO BE STAMPED AT 4\" 1/2\" INTERVALS WITH THE PREFIX \"B\" ON ALL LEADS.
  2. TAG HARNESS FOR IDENTIFICATION.
  3. STRIP INSULATION BACK 3/8\" ON UNTERMINATED LEADS.
  4. REFER TO DWG. #52001156 FOR HARNESS SPECIFICATIONS.
  5. APPLY CONVOLUTE TUBING OF MINIMUM SIZE TO MAIN TRUNK OF ENTIRE HARNESS.
  6. TAPE CONVOLUTE TO HARNESS AT ENDS.
  7. FULLY TAPE HARNESS WHERE HEAVY LINES HAVE BEEN SHOWN.
  8. DASHED LINES INDICATE CIRCUIT SPLICES.
  9. SPIRAL TAPE ENTIRE HARNESS.
  10. WHERE \"XX\" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
  11. WHERE \"\*\" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEEDED FOR TERMINATION.

**52004678 B**

**HARNESS CHART, MAIN BODY, REAR (S. CAROLINA)**

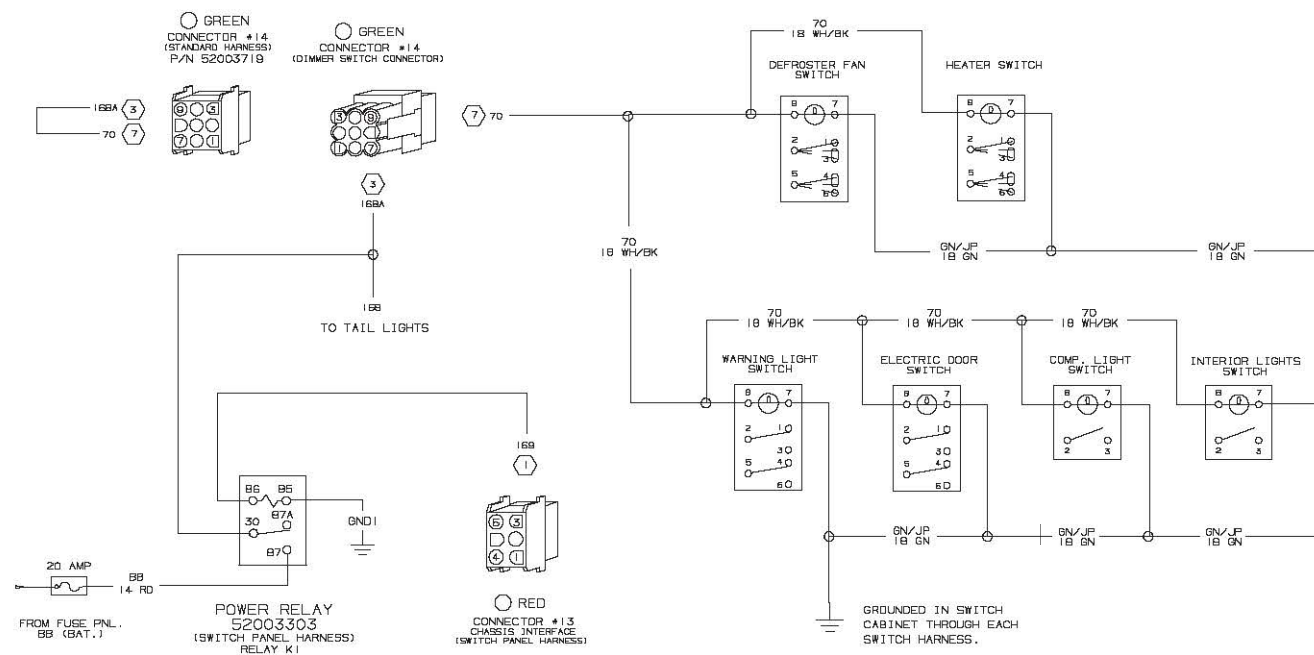
End Date: 9/4/02

**LIGHT  
SECTION**



## SYSTEM OPERATION STANDARD SWITCH PANEL LIGHTING

1. ALL SWITCHES LOCATED ON THE SWITCH PANEL ARE TO ILLUMINATE WHEN THE CHASSIS PARK LIGHT CIRCUIT IS ACTIVATED.



STANDARD SWITCH PANEL LIGHTING  
MINOTOUR SRW, DRW

**Thomas**  
52003767 B

SWITCH PANEL LIGHTING,  
STANDARD OPERATION

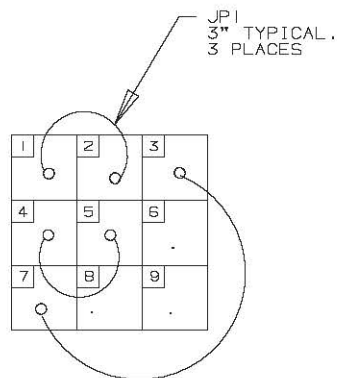
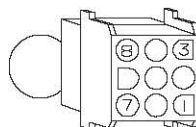
End Date: 9/3/02

CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLING	98916716001	SWITCH CONNECTOR	.
	PED	12015868	18-20 GA TERMINAL	.
	PED	12015870	14-16 GA TERMINAL	.
14	AMP	770005-1	14-20 GA. TERMINAL, PIN.	6
	AMP	770003-3	10-12 GA. TERMINAL, PIN.	.
	AMP	770028-1	9 POSITION CONNECTOR, CAP.	1
RELAY K1	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

5.STRIP INSULATION BACK 3/8" ON  
UNTERMINATED LEADS.  
4.REFER TO DWG. #52001136 FOR HARNESS  
SPECIFICATIONS.  
3.FULLY TAPE BREAKOUTS FOR 3"-  
2" SPACING OTHERWISE.  
2.TAG HARNESS FOR IDENTIFICATION.  
1.CIRCUIT NUMBERS TO BE STAMPED AT  
4" INTERVALS WITH THE PREFIX "B"  
NOTES: ON ALL LEADS.


LEAD #	AWG	COLOR	DESCRIPTION
JPI	16	BLACK	JUMPER, 21F, 21A-21R, 21B-16BA, 70.
.	.	.	.

○ GREEN  
CONNECTOR #14  
(DIMMER SWITCH CONNECTOR)



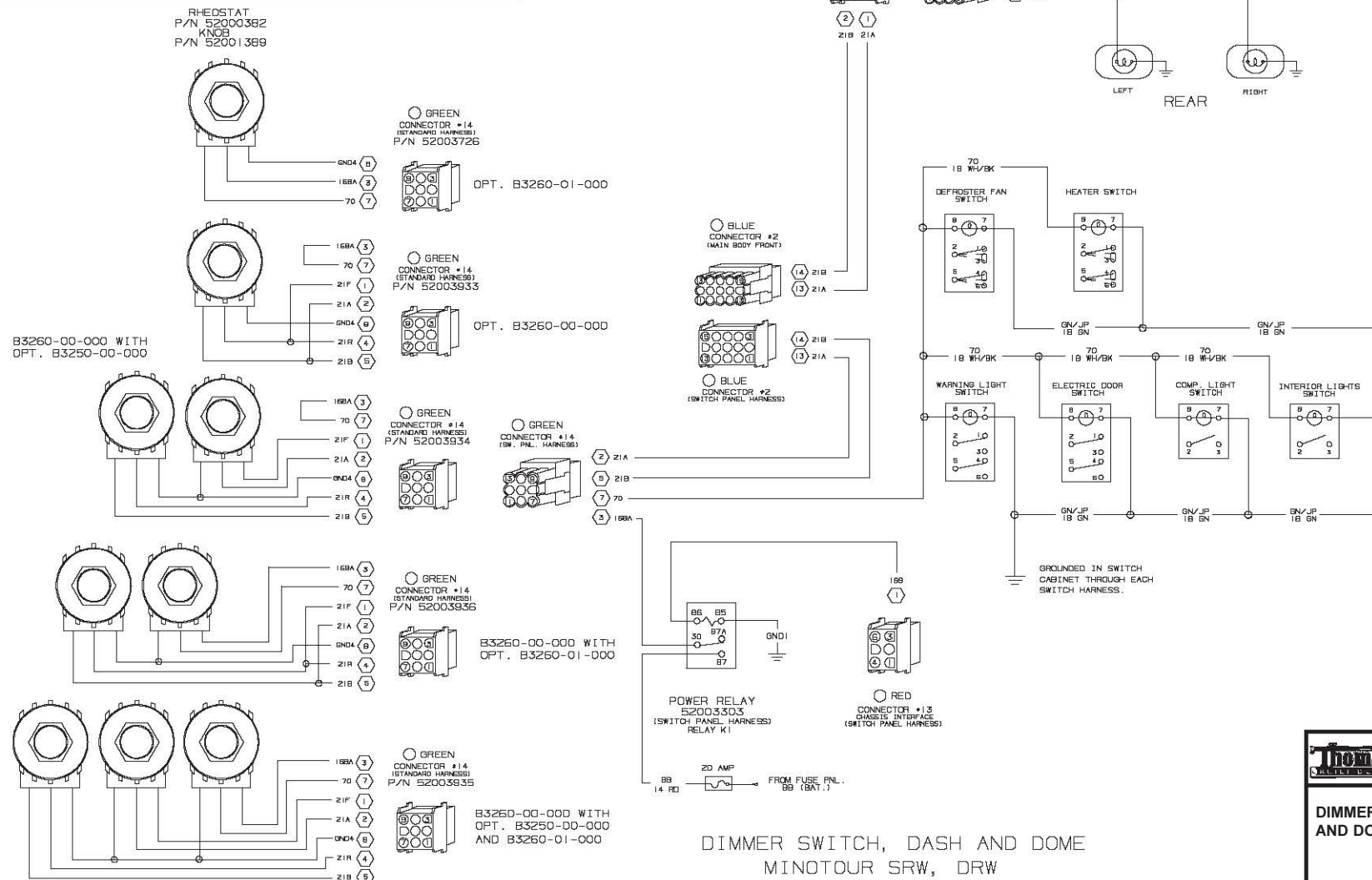
DIMMER BY-PASS, DASH LIGHTING  
STANDARD ACTIVATION, SRW, DRW

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	.
	VENDOR	PART #	DESCRIPTION	QTY

	52003719 B
HARNESS, DIMMER BY-PASS, DASH/DOME LIGHTS	
End Date: 9/4/02	

(OPT, B3260-00-000, B3260-01-000)

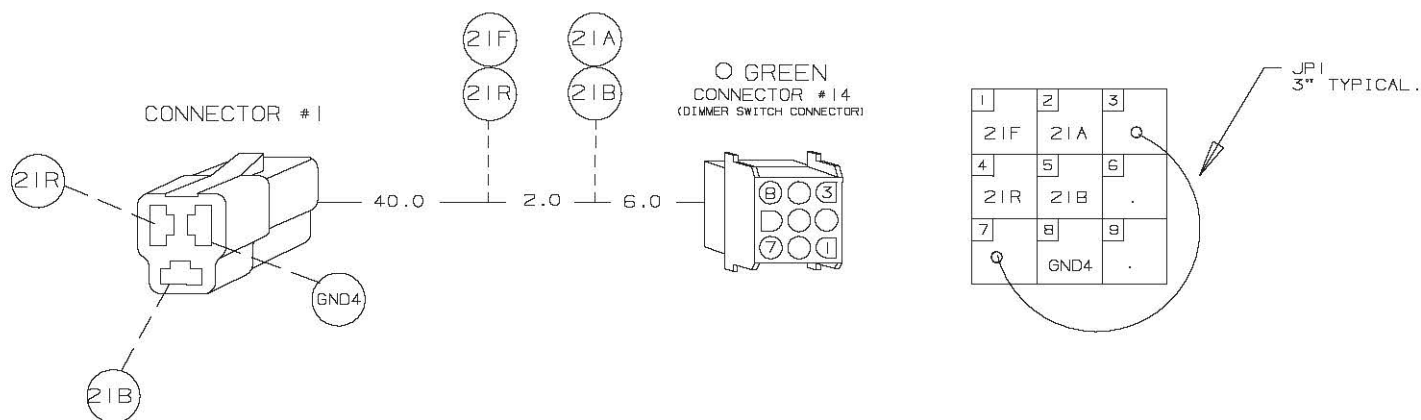
1. ALL SWITCHES LOCATED ON THE SWITCH PANEL ARE TO ILLUMINATE WHEN THE CHASSIS PARK LIGHT CIRCUIT IS ACTIVATED.
2. ILLUMINATION TO BE CONTROLLED BY DIMMER SWITCH LOCATED ON THE SWITCH PANEL.
3. DOME LIGHTING BRIGHTNESS TO BE CONTROLLED THROUGH RHEOSTAT SWITCH LOCATED ON SWITCH PANEL.



CONN	VENDOR	PART #	DESCRIPTION	QTY
I	PACKARD	B900542	3 PIN CONNECTOR, PLUG	1
	PACKARD	12124502	14-16 GA. TERMINAL	3
	.	.	.	.
14	AMP	770005-1	14-20 GA. TERMINAL, PIN.	7
	AMP	770003-3	10-12 GA. TERMINAL, PIN.	.
	AMP	770028-1	9 POSITION CONNECTOR, CAP.	1
RELAY K1	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

6. SPIRAL TAPE HARNESS.  
5. STRIP INSULATION BACK 3/8" ON  
UNTERMINATED LEADS.  
4. REFER TO DWG. #52001136 FOR HARNESS  
SPECIFICATIONS.  
3. FULLY TAPE BREAKOUTS FOR 3"-  
2" SPACING OTHERWISE.  
2. TAG HARNESS FOR IDENTIFICATION.  
1. CIRCUIT NUMBERS TO BE STAMPED AT  
4" INTERVALS WITH THE PREFIX "B"  
NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
JPI	16	BLACK	CONNECTOR JUMPER, 21F-21A, 168A-70
21R	16	RED	REAR DOME LIGHT SIGNAL.
21B	16	WHITE	REAR DOME LIGHT FEED (+).
GND4	14	BLACK	DIMMER SWITCH GROUND.
21F	16	RED	FRONT DOME LIGHT SIGNAL.
21A	16	WHITE	FRONT DOME LIGHT FEED (+).



DIMMER, DOME LIGHTING  
OPT. B3260-00-000, SRW, DRW

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECP., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	.
	VENDOR	PART #	DESCRIPTION	QTY

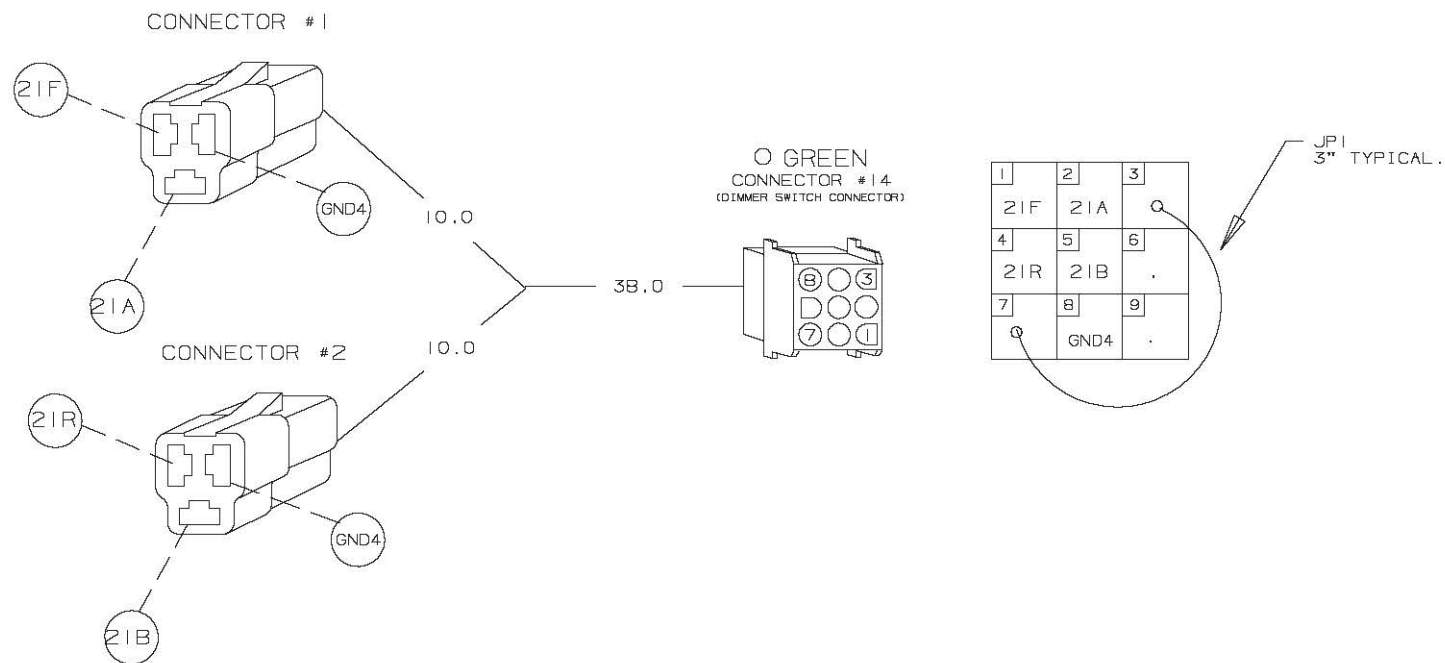
<b>Thomas</b> SOLUTIONS	52003933 A
HARNESS, DIMMER	
Option: B3260-00-000	



CONN	VENDOR	PART #	DESCRIPTION	QTY
1,2	PACKARD	8900542	3 PIN CONNECTOR, PLUG	2
	PACKARD	12124502	14-16 GA. TERMINAL	6
14	AMP	770005-1	14-20 GA. TERMINAL, PIN.	7
	AMP	770003-3	10-12 GA. TERMINAL, PIN.	.
	AMP	770028-1	9 POSITION CONNECTOR, CAP.	1
RELAY K1	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

6. SPIRAL TAPE HARNESS.
  5. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
  4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
  3. FULLY TAPE BREAKOUTS FOR 3"-2" SPACING OTHERWISE.
  2. TAG HARNESS FOR IDENTIFICATION.
  1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"
- NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
JPI	16	BLACK	CONNECTOR JUMPER, 16BA-70.
21R	16	RED	REAR DOME LIGHT SIGNAL.
21B	16	WHITE	REAR DOME LIGHT FEED (+).
GND4	14	BLACK	DIMMER SWITCH GROUND.
21F	16	RED	FRONT DOME LIGHT SIGNAL.
21A	16	WHITE	FRONT DOME LIGHT FEED (+).



DIMMER, DOME LIGHTING  
OPT. B3260-00-000 WITH  
OPT. B3250-00-000, SRW, DRW

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	.
	VENDOR	PART #	DESCRIPTION	QTY

<b>Thomas</b> SOLUTIONS	52003934 A
<b>HARNESS, DIMMER</b>	
Option: B3260-00-000 w/B3250-00-000	

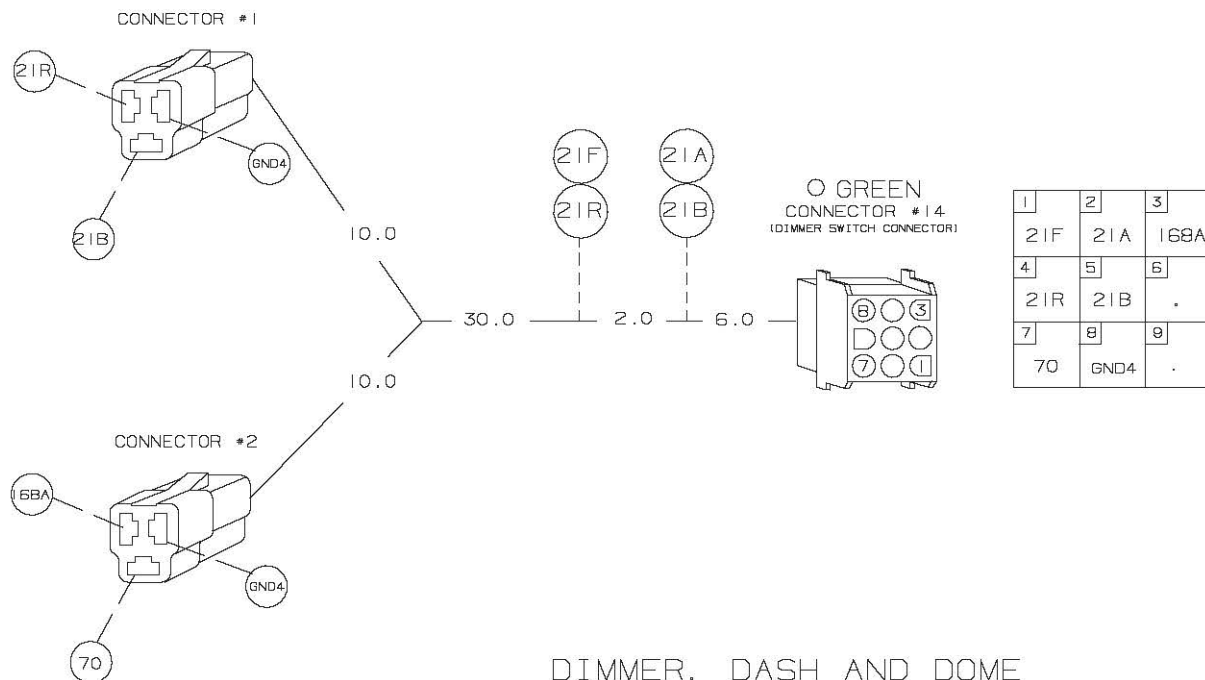


CONN	VENDOR	PART #	DESCRIPTION	QTY
1, 2	PACKARD	8800542	3 PIN CONNECTOR, PLUG	2
	PACKARD	12124502	14-16 GA. TERMINAL	6
14	.	.	.	.
	AMP	770005-1	14-20 GA. TERMINAL, PIN.	7
	AMP	770003-3	10-12 GA. TERMINAL, PIN.	.
RELAY KI	AMP	770028-1	9 POSITION CONNECTOR, CAP.	1
	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

6. SPIRAL TAPE HARNESS.  
5. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.  
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.  
3. FULLY TAPE BREAKOUTS FOR 3"-2" SPACING OTHERWISE.  
2. TAG HARNESS FOR IDENTIFICATION.  
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"

NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
168A	14	BROWN	PARK LIGHTS SIGNAL
21R	16	RED	REAR DOME LIGHT SIGNAL.
21B	16	WHITE	REAR DOME LIGHT FEED (+).
GND4	14	BLACK	DIMMER SWITCH GROUND.
21F	16	RED	FRONT DOME LIGHT SIGNAL.
21A	16	WHITE	FRONT DOME LIGHT FEED (+).
70	14	WHITE/BLACK	SWITCH LIGHTING FEED (+).



DIMMER, DASH AND DOME  
OPT. B3260-00-000 WITH  
OPT. B3260-01-000, SRW, DRW

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECP., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	.
	VENDOR	PART #	DESCRIPTION	QTY

<b>Thomas</b> SOLUTIONS	52003936 A
<b>HARNESS, DIMMER</b>	
Option: B3260-00-000 w/B3260-01-000	

LEAD #	AWG	COLOR	DESCRIPTION
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+)
.	.	.	.
.	.	.	.

CONNECTOR # 5 CAVITY # 3  $\triangle C$   $\bigcirc 70$  — 8.0 —  $\bigcirc 70$   $\triangle B$  TO RHEOSTAT (RED WIRE)

CONNECTOR # 8 CAVITY # 1  $\triangle C$   $\bigcirc 70$  — 24.5 —  $\bigcirc 70$   $\triangle A$  CAVITY #14 CONNECTOR # 5

4. STRIP INSULATION BACK 3/8" ON  
UNTERMINATED LEADS.

3. REFER TO DWG. #52001136 FOR HARNESS  
SPECIFICATIONS.

2. TAG HARNESS FOR IDENTIFICATION.

1. CIRCUIT NUMBERS TO BE STAMPED AT  
4" INTERVALS WITH THE PREFIX "B"

NOTES: ON ALL LEADS.

OPTION: B3260-01-000

C	AMP	770005-1	14-16 GA TERMINAL, PIN	2
B	.	.	1/4" FEMALE SPADE FAST-ON 14-16 GA	1
A	AMP	770006-3	14-16 GA. TERMINAL, RECP.	1
	VENDOR	PART #	DESCRIPTION	QTY

APPROVED VENDOR: E.S.I  
1200 JAY LANE  
GRAHAM, NC 27253

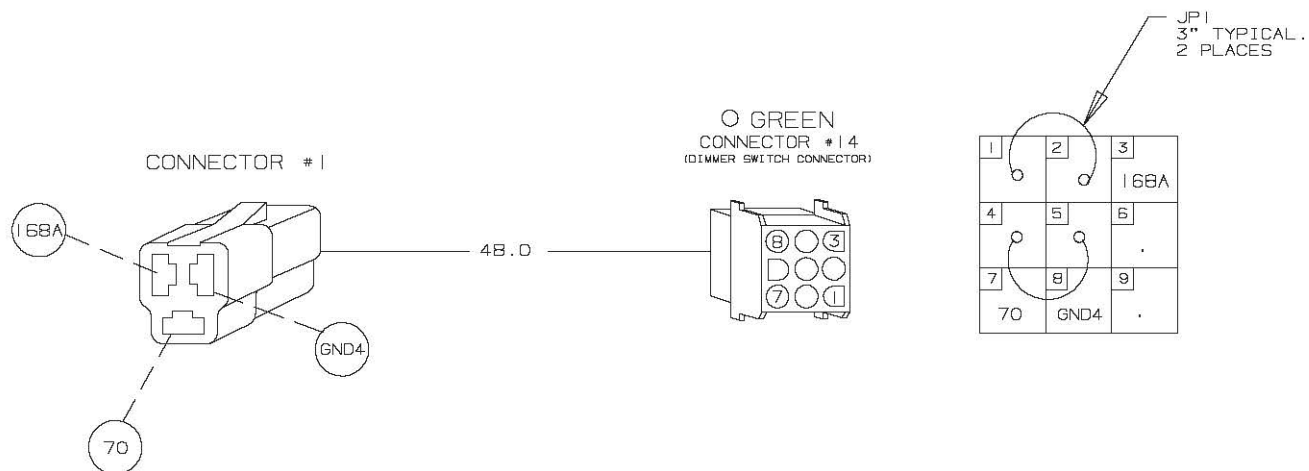
	52003350 D
HARNESS, LIGHT RHEOSTAT WIRING	
Option: B3260-01-000	



CONN	VENDOR	PART #	DESCRIPTION	QTY
1	PACKARD	8900542	3 PIN CONNECTOR, PLUG	1
	PACKARD	12124502	14-16 GA. TERMINAL	3
14	AMP	770005-1	14-20 GA. TERMINAL, PIN.	7
	AMP	770003-3	10-12 GA. TERMINAL, PIN.	.
	AMP	770028-1	9 POSITION CONNECTOR, CAP.	1
RELAY K1	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

4. STRIP INSULATION BACK 3/8" ON  
UNTERMINATED LEADS.  
3. REFER TO DWG. #52001136 FOR HARNESS  
SPECIFICATIONS.  
2. TAG HARNESS FOR IDENTIFICATION.  
1. CIRCUIT NUMBERS TO BE STAMPED AT  
4" INTERVALS WITH THE PREFIX "B"  
NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
JPI	16	BLACK	CONNECTOR JUMPER, 21F, 21A-21R, 21B
168A	14	RED	MARKER LIGHTS FEED TO SWITCHES.
70	14	WHITE	SWITCH PANEL LIGHTS FEED (+).
GND4	14	BLACK	DIMMER SWITCH GROUND.



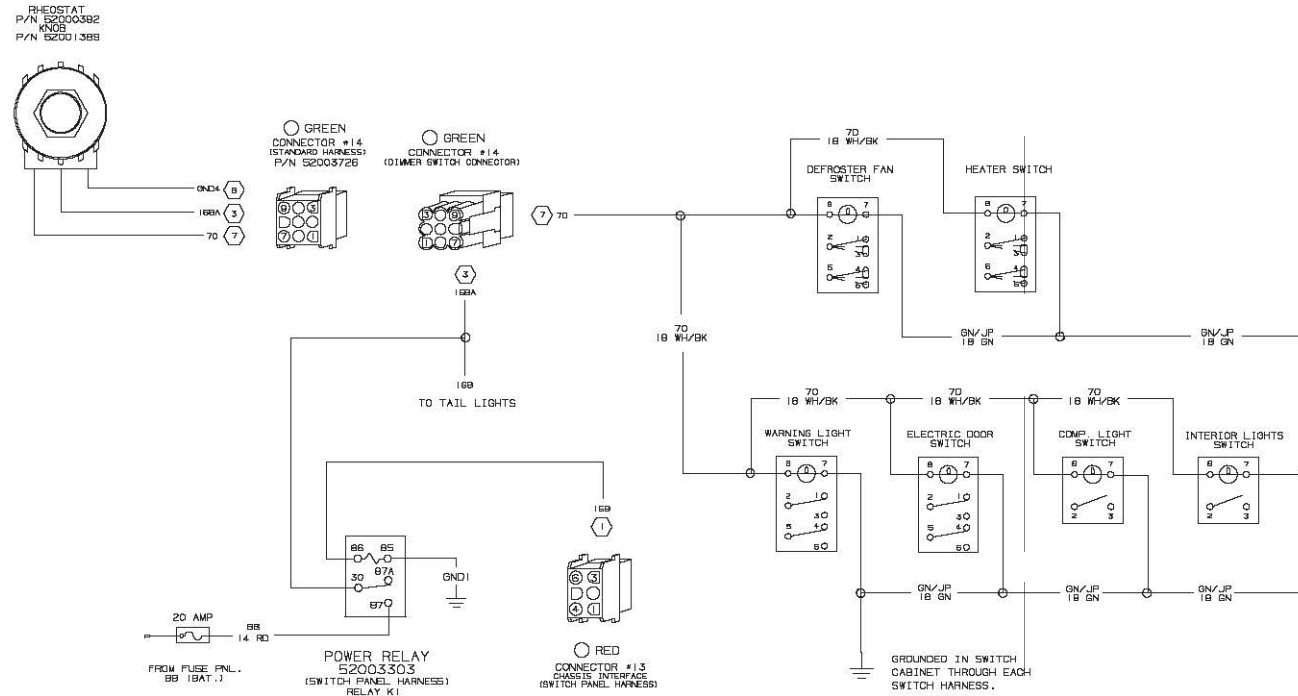
DIMMER, DASH LIGHTING  
OPT. B3260-01-000, SRW, DRW

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECP., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	.
	VENDOR	PART #	DESCRIPTION	QTY

<b>Thomas</b> SOLUTIONS	52003726 B
<b>HARNESS, DIMMER SWITCH</b>	
Option: B3260-01-000	

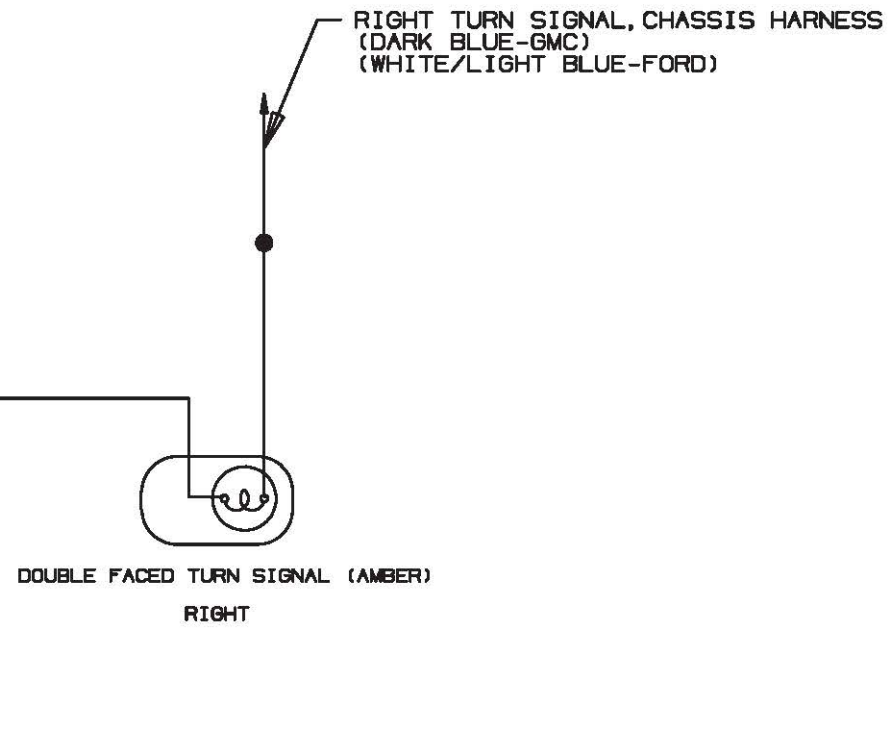
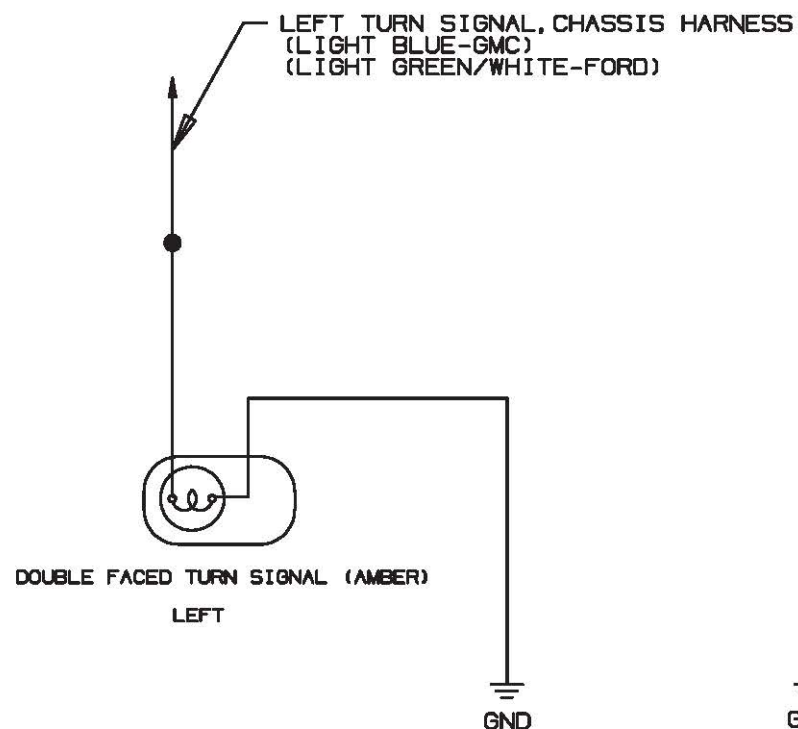
## SYSTEM OPERATION (DIMMER SWITCH OPT. B3260-01-000)

1. ALL SWITCHES LOCATED ON THE SWITCH PANEL ARE TO ILLUMINATE WHEN THE CHASSIS PARK LIGHT CIRCUIT IS ACTIVATED.
2. ILLUMINATION TO BE CONTROLLED BY DIMMER SWITCH LOCATED ON THE SWITCH PANEL.



DIMMER SWITCH OPT. B3260-01-000  
MINOTOUR SRW, DRW

<b>Thomas</b> SOLUTIONS	52003768 A
<b>DIMMER SWITCH</b>	
Option: B3260-01-000	



FRONT

NOTES:


GMC INSTALLATION:

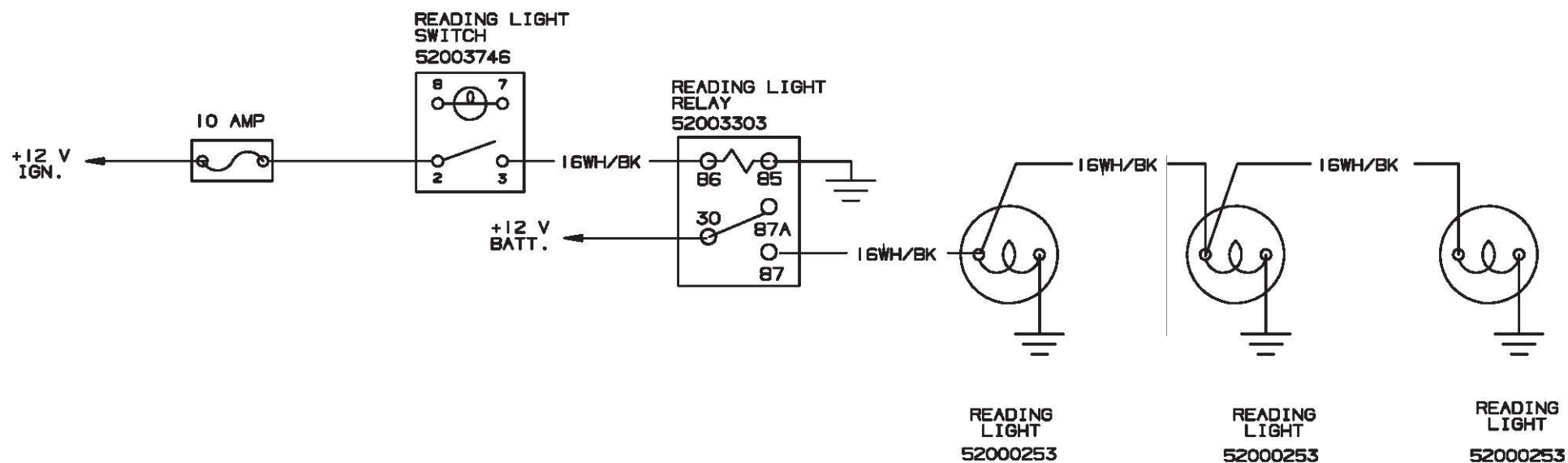
SPLICE THE RED WIRE OF  
DOUBLE FACED TURN SIGNAL  
INTO THE DARK BLUE AND  
LIGHT BLUE CHASSIS WIRES  
LOCATED IN A CONNECTOR ON THE  
CHASSIS, UNDER HOOD FORWARD  
OF POWER DISTRIBUTION BOX.


FORD INSTALLATION:

SPLICE THE RED WIRE OF  
DOUBLE FACED TURN SIGNAL  
INTO THE WHITE/LIGHT BLUE  
AND LIGHT GREEN/WHITE CHASSIS  
FRONT TURN SIGNAL WIRES.

OPTION B3420-08-000  
MINOTOUR, SRW, DRW

	52004024 A
DOUBLE FACED TURN SIGNAL  Option: 3420-08-000	



	52004738 A
READING LIGHTS	



CONN	VENDOR	PART #	DESCRIPTION	QTY
1, 2	CARLING	99916716001	SWITCH CONNECTOR	2
	PED	XX	18-20 GA TERMINAL	X
	PED	XX	14-16 GA TERMINAL	X
9	AMP	XX	14-20 GA. TERMINAL, PIN.	X
	AMP	XX	10-12 GA. TERMINAL, PIN.	X
	AMP	770029-1	12 POSITION CONNECTOR, CAP.	1
10	AMP	XX	14-20 GA. TERMINAL, PIN.	X
	AMP	XX	10-12 GA. TERMINAL, PIN.	X
	AMP	770029-1	9 POSITION CONNECTOR, CAP.	1

7. WHERE "X" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEEDED FOR TERMINATION.
8. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
5. USE WIRE TIES TO HOLD HARNESS WHERE NEEDED, MINIMUM AMOUNT AND SIZE.
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
3. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
2. TAG HARNESS FOR IDENTIFICATION.
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.

NOTES:

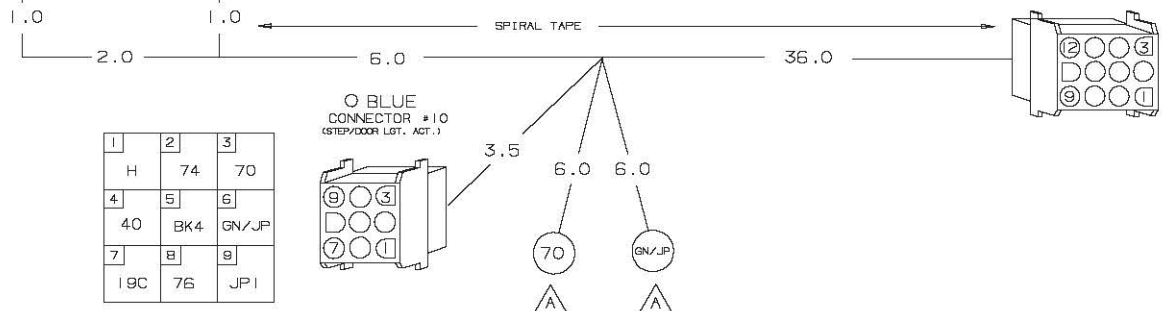
LEAD #	AWG	COLOR	DESCRIPTION
H	14	RED	12V+ IGN. FROM FUSE PANEL.
BK4	18	BLACK	FROM SWITCH TO DOME RELAY (+).
40	16	BROWN/WHITE	MARKER LIGHTS FEED.
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+)
GN/JP	18	GREEN	GROUND, SWITCH LIGHT JUMPER (-).
74	16	BLACK/RED	STEP LIGHTS FEED (+)
19	14	BLACK	INTERIOR LIGHTS FEED (OPT.)
76	16	BLACK/YELLOW	DOOR LIGHTS FEED (+)
20	16	WHITE/BLACK	FEED TO COMPARTMENT LIGHT.
19C	16	BLACK/WHITE	INTERIOR LIGHTS (REAR)
JP1	16	BLACK/ORANGE	FEED FROM STEP/DOOR RELAY K4.
.	.	.	.
.	.	.	.
.	.	.	.

DOME LGT. SWITCH CONNECTOR #1 (REAR VIEW)

8	7
70	GN/JP
1	4
.	.
2	5
H	.
3	6
19	.
19C	.

COMPARTMENT LIGHT CONNECTOR #2 (REAR VIEW)

8	7
70	GN/JP
1	4
.	.
2	5
H	.
3	6
20	.

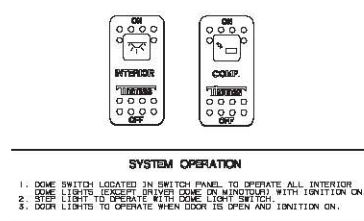


1	2	3
70	GN/JP	.
4	5	6
H	20	JP1
7	8	9
74	19	76
10	11	12
40	19C	BK4

D	XX	XX	BUTT SPLICE, 14-16 GA BLUE.	X
C	XX	XX	RING TERMINAL, #10 STUD, 14-16 GA.	X
B	XX	XX	MALE RECEP., 1/4", 14-16 GA.	X
A	XX	XX	FEMALE FAST-ON, 1/4", 14-16 GA.	X
	VENDOR	PART #	DESCRIPTION	QTY

DOME/STEP LIGHTING  
STANDARD ACTIVATION, SRW, DRW

	52003674 C
HARNESS, SWITCH WIRING, DOME AND STEP LIGHT	
End Date: 9/5/02	

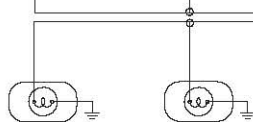
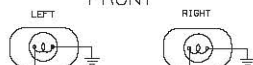


### DRIVER'S DOME



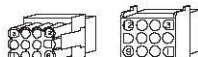
CONNECT TO FACTORY WIRING. FOR GM USE ORANGE (+) & WHITE (-), FOR FORD USE BLACK W/BLUE STRIPE (+) AS FEED. CREATE GROUND, WIRING LOCATED ON DRIVERS SIDE B-PILLAR, BOTH CHASSIS.

### INTERIOR LIGHTS FRONT



### REAR

RED CONNECTOR #16 (MAIN BODY FRONT)



21B 21A



21B 21A

14 13



14 13

BLUE CONNECTOR #2 (MAIN BODY FRONT)

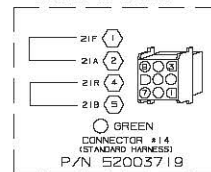


14 13



14 13

DIMMER CONFIGURATION PLUG. STANDARD BY-PASS CIRCUIT IS SHOWN.

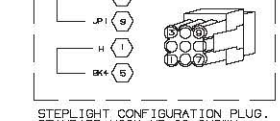
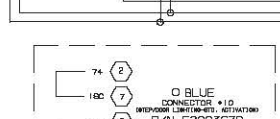
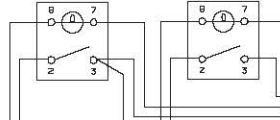
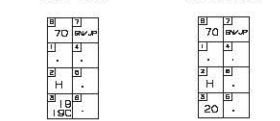


14 13

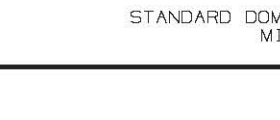
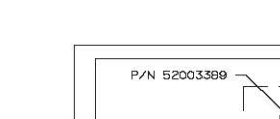
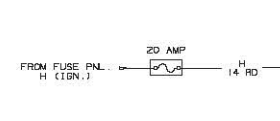


14 13

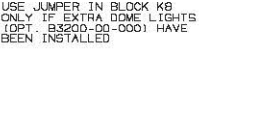
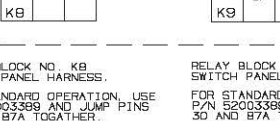
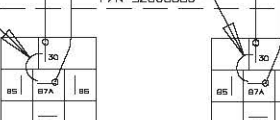
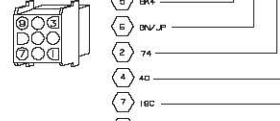
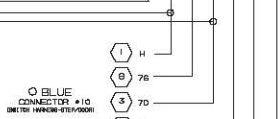
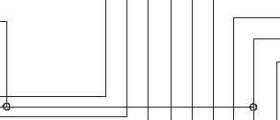
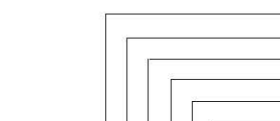
DOME LIGHT SWITCH STANDARD (REAR VIEW)



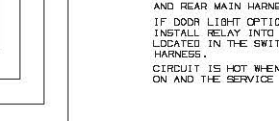
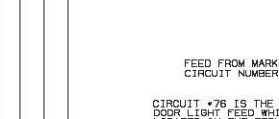
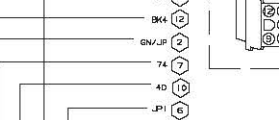
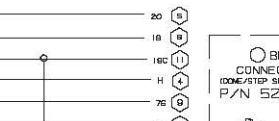
STEPLIGHT CONFIGURATION PLUG. STANDARD HOOK-UP IS SHOWN.



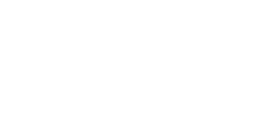
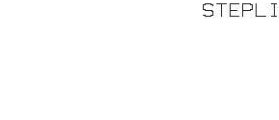
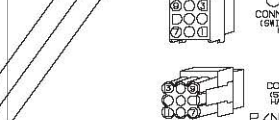
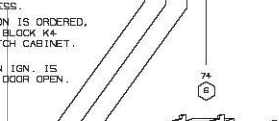
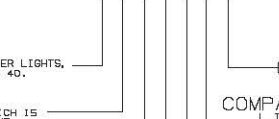
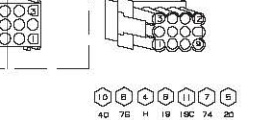
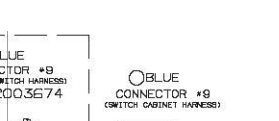
COMPARTMENT LIGHT STANDARD (REAR VIEW)



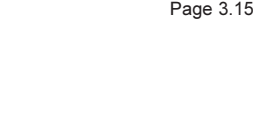
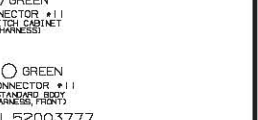
BLUE CONNECTOR #9 (DOME/STEP SWITCH HARNESS) P/N 52003674



BLUE CONNECTOR #8 (SWITCH CABINET HARNESS)



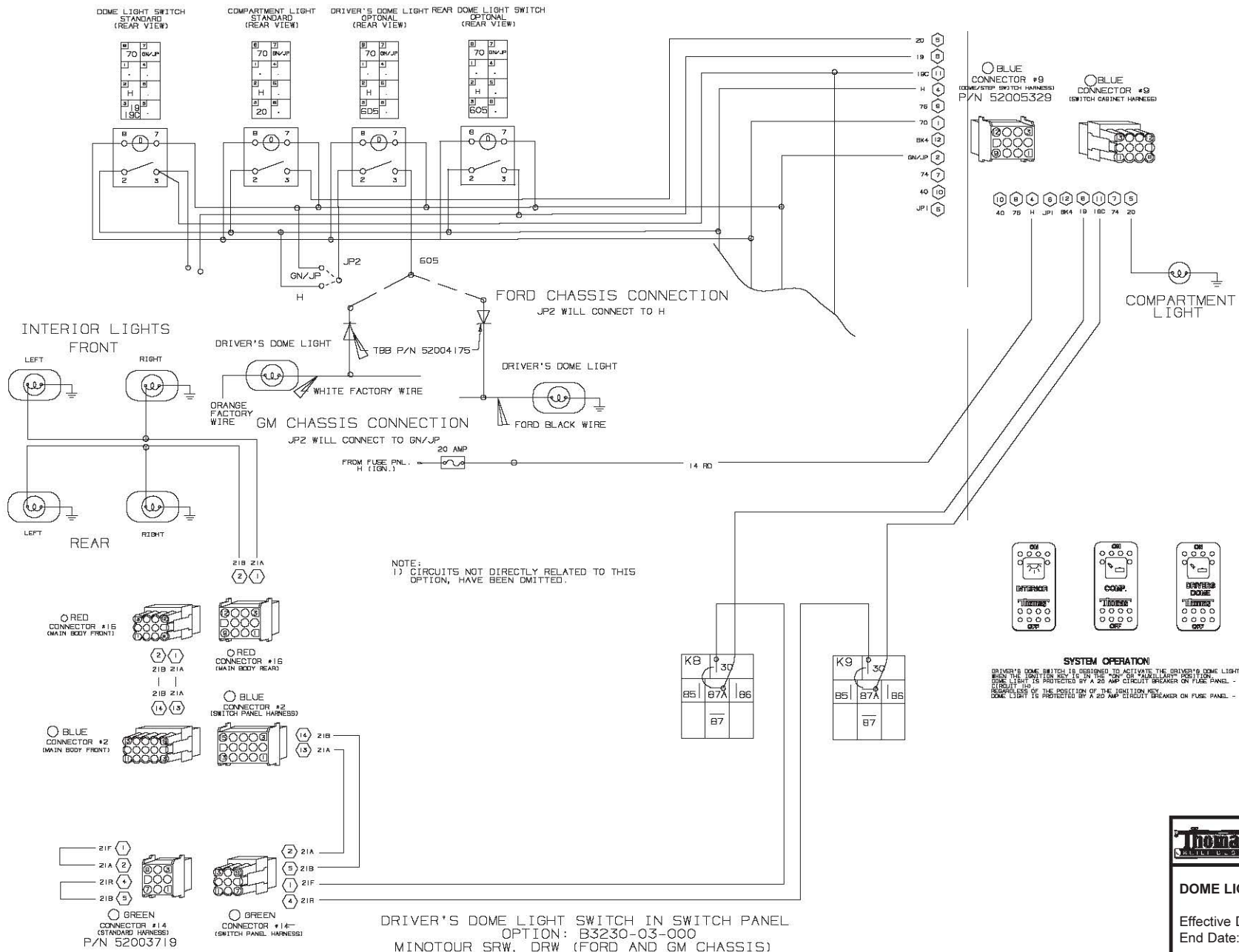
GREEN CONNECTOR #11 (SWITCH CABINET HARNESS)



STANDARD DOME/STEP/DOOR LIGHT OPERATION MINITOUR SRW, DRW

52003693 C

DOME LIGHT, STANDARD ACTIVATION



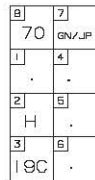
CONN	VENDOR	PART #	DESCRIPTION	QTY
1, 2, 3	CARLING	89916716001	SWITCH CONNECTOR	3
	PED	XX	18-20 GA. TERMINAL	X
	PED	XX	14-16 GA. TERMINAL	X
9	AMP	XX	14-20 GA. TERMINAL, PIN.	X
	AMP	XX	10-12 GA. TERMINAL, PIN.	X
	AMP	770029-1	12 POSITION CONNECTOR, CAP.	1
10	AMP	XX	14-20 GA. TERMINAL, PIN.	X
	AMP	XX	10-12 GA. TERMINAL, PIN.	X
	AMP	770029-1	8 POSITION CONNECTOR, CAP.	1
DIODE A	.	.	.	.
	XX	XX	6 AMP, 400 VOLT	X
	.	.	.	.

- WHERE "X" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEEDED FOR TERMINATION.
- WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
- USE WIRE TIES TO HOLD HARNESS WHERE NEEDED, MINIMUM AMOUNT AND SIZE.
- REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
- STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
- TAG HARNESS FOR IDENTIFICATION.
- CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.

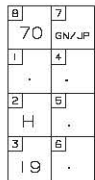
NOTES:

LEAD #	AWG	COLOR	DESCRIPTION
H	14	RED	12V+ IGN. FROM FUSE PANEL.
BK4	18	BLACK	FROM SWITCH TO DOME RELAY (+).
40	16	BROWN/WHITE	MARKER LIGHTS FEED.
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+).
GN/JP	18	GREEN	GROUND, SWITCH LIGHT JUMPER (-).
20	16	WHITE/BLACK	FEED TO COMPARTMENT LIGHT.
19C	16	BLACK/WHITE	INTERIOR LIGHTS (REAR)
74	16	BLACK/RED	STEP LIGHTS FEED (+).
19	16	BLACK	INTERIOR LIGHTS FEED (OPT.)
76	16	BLACK/YELLOW	DOOR LIGHTS FEED (+).
JP1	16	BLACK/ORANGE	FEED FROM STEP/DOOR RELAY.
JP2	16	RED	ISOLATED FEED FROM DOME SWITCHES.
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

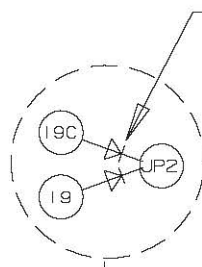
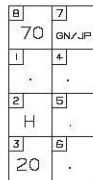
DOME LST. SWITCH CONNECTOR #1 (REAR VIEW)



DOME LST. SWITCH CONNECTOR #2 (REAR VIEW)

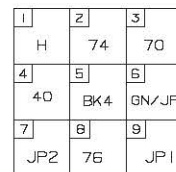
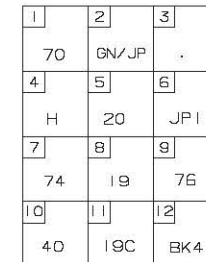
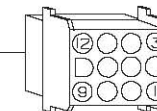


COMPARTMENT LIGHT CONNECTOR #3 (REAR VIEW)

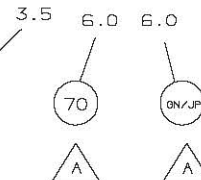
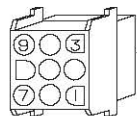


NOTE: CIRCUITS 19 AND 19C ORIGINATE IN CONNECTOR 9 AND TERMINATE IN CONNECTORS 1 AND 2. JP2 ORIGINATES AT THIS LOCATION AND TERMINATES IN CONN. #10.

BLUE CONNECTOR #9 (DOME/STEP HARNESS)



BLUE CONNECTOR #10 (STEP/DOOR LST. ACT.)



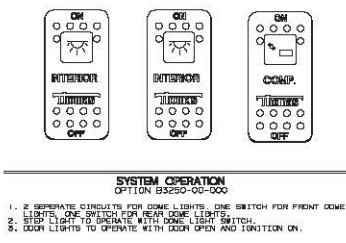
DOME/STEP LIGHTING  
OPTION B3250-00-000 SRW, DRW

D	XX	XX	BUTT SPLICE, 14-16 GA. BLUE.	X
C	XX	XX	RING TERMINAL, #10 STUD, 14-16 GA.	X
B	XX	XX	MALE RECP., 1/4", 14-16 GA.	X
A	XX	XX	FEMALE FAST-ON, 1/4", 14-16 GA.	X
	VENDOR	PART #	DESCRIPTION	QTY

52003690 B

**HARNESS, SWITCH WIRING, DOME**  
Option: B3250-00-000



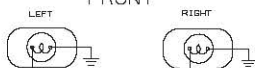


### DRIVER'S DOME



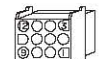
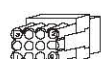
CONNECT TO FACTORY WIRING. FOR SW USE ORANGE (+) & WHITE (-). FOR FORD USE BLACK W/BUE STRIPE (+) AS FEED. CREATE GROUND. WIRING LOCATED ON DRIVERS SIDE B-PILLAR, BOTH CHASSIS.

### INTERIOR LIGHTS FRONT



### REAR

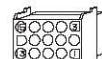
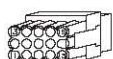
RED CONNECTOR #15 (MAIN BODY FRONT)



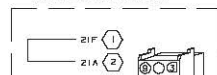
RED CONNECTOR #15 (MAIN BODY REAR)

BLUE CONNECTOR #2 (SWITCH PANEL HARNESS)

BLUE CONNECTOR #2 (MAIN BODY FRONT)

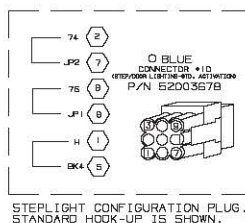
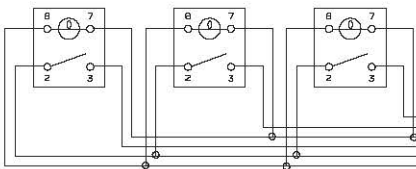
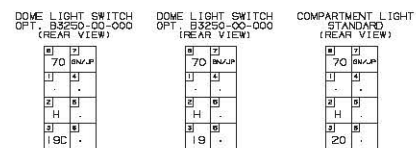


DIMMER CONFIGURATION PLUG - STANDARD BY-PASS CIRCUIT IS SHOWN.

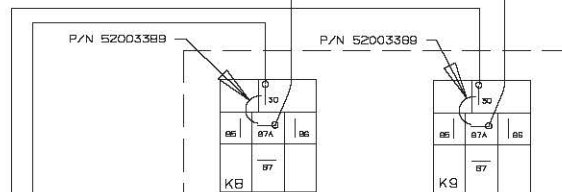


GREEN CONNECTOR #14 (STANDARD HARNESS) P/N 52003719

GREEN CONNECTOR #14 (SWITCH PANEL HARNESS)

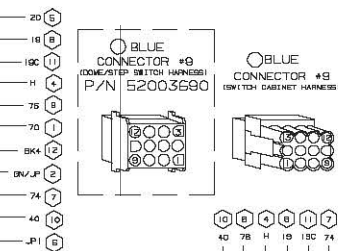


FROM FUSE PNL. H (IGN.) 20 AMP 14 RD



RELAY BLOCK NO. K8 SWITCH PANEL HARNESS. RELAY BLOCK NO. K9 SWITCH PANEL HARNESS. JUMPER 52003389 MUST BE INSTALLED IN BOTH RELAY BLOCKS FOR OPTION B3250-00-000. JUMP PINS B7A AND 30 TOGETHER.

DOME OPTION B3250-00-000 W/STD. STEP/DOOR LIGHTS MINOTOUR SRW, DRW



FEED FROM MARKER LIGHTS, CIRCUIT NUMBER 40.

CIRCUIT #26 IS THE DOOR LIGHT FEED WHICH IS LOCATED IN THE FRONT AND REAR MAIN HARNESS. IF DOOR LIGHT OPTION IS ORDERED, INSTALL RELAY INTO BLOCK K4 LOCATED IN THE SWITCH CABINET HARNESS. CIRCUIT IS HOT WHEN IGN. IS ON AND THE SERVICE DOOR OPEN.

### COMPARTMENT LIGHT



GREEN CONNECTOR #11 (SWITCH CABINET HARNESS)



GREEN CONNECTOR #11 (STANDARD BODY HARNESS, FRONT) P/N 52003777

### STEPLIGHT

	52003702 C
DOME LIGHT	
Option: B3250-00-000	

## SYSTEM OPERATION

OPT. B3255-00-000, B3255-01-000  
AND OPT. B3255-02-000

- ALL DOME LIGHTS ACTIVATED WHEN REAR EMERGENCY DOOR IS OPENED IN ADDITION TO THEIR NORMAL ACTIVATION BY SWITCH(ES) LOCATED IN SWITCH PANEL.

### DRIVER'S DOME



CONNECT TO FACTORY WIRING. FOR GM USE ORANGE (+) & WHITE (-). FOR FORD USE BLACK W/BUE STRIPE (+) & AS FEED. CREATE GROUND WIRING LOCATED ON DRIVERS SIDE B-PILLAR, BOTH CHASSIS.

### INTERIOR LIGHTS FRONT



### REAR



RED CONNECTOR #16 (MAIN BODY FRONT)



RED CONNECTOR #16 (MAIN BODY REAR)



BLUE CONNECTOR #2 (MAIN BODY FRONT)



BLUE CONNECTOR #2 (SWITCH PANEL HARNESS)



GREEN CONNECTOR #14 (STANDARD HARNESS) P/N 52003719



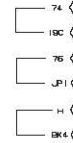
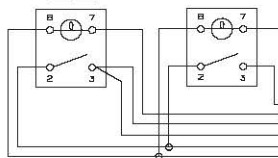
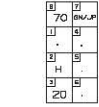
GREEN CONNECTOR #14 (SWITCH PANEL HARNESS)



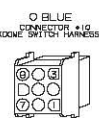
DOME LIGHT SWITCH STANDARD (REAR VIEW)



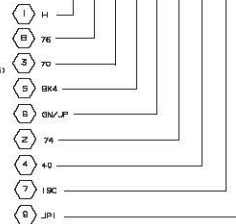
COMPARTMENT LIGHT STANDARD (REAR VIEW)



BLUE CONNECTOR #10 (STEP/DOOR LIGHT DOWN) P/N 52003678



BLUE CONNECTOR #10 (DOME SWITCH HARNESS)



FEED FROM MARKER LIGHTS, CIRCUIT NUMBER 4D.

CIRCUIT #76 IS THE DOOR LIGHT FEED WHICH IS LOCATED IN THE FRONT AND REAR MAIN HARNESS. IF DOOR LIGHTS ARE INSTALLED, ADD RELAY TO BLOCK K4 LOCATED IN THE SWITCH PANEL HARNESS. DOOR LIGHTS ARE HOT WHEN SERVICE DOOR IS OPEN AND IGN. IS ON.

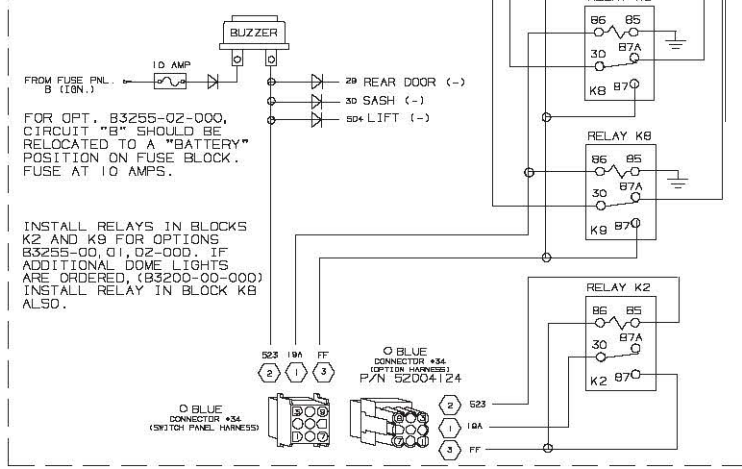
FROM FUSE PNL. H (IGN.)



FROM FUSE PNL. FF (BAT.)



P/N 52004023, SWITCH PANEL



FOR OPT. B3255-02-000, CIRCUIT "B" SHOULD BE RELOCATED TO A "BATTERY" POSITION ON FUSE BLOCK. FUSE AT 10 AMPS.

INSTALL RELAYS IN BLOCKS K2 AND K9 FOR OPTIONS B3255-00, 01, 02-000. IF ADDITIONAL DOME LIGHTS ARE ORDERED, (B3200-00-000) INSTALL RELAY IN BLOCK K8 ALSO.

BLUE CONNECTOR #34 (SWITCH PANEL HARNESS)



BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124



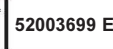
BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124



BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124



BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124



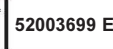
BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124



BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124



BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124



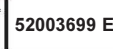
BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124



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BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124



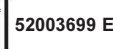
BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124



BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124



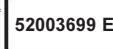
BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124



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BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124



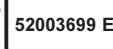
BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124



BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124



BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124



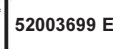
BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124



BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124



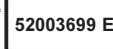
BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124



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BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124



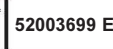
BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124



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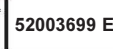
BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124



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BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124



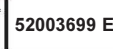
BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124



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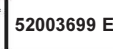
BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124



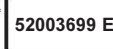
BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124



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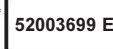
BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124



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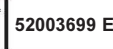
BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124



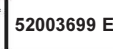
BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124



BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124

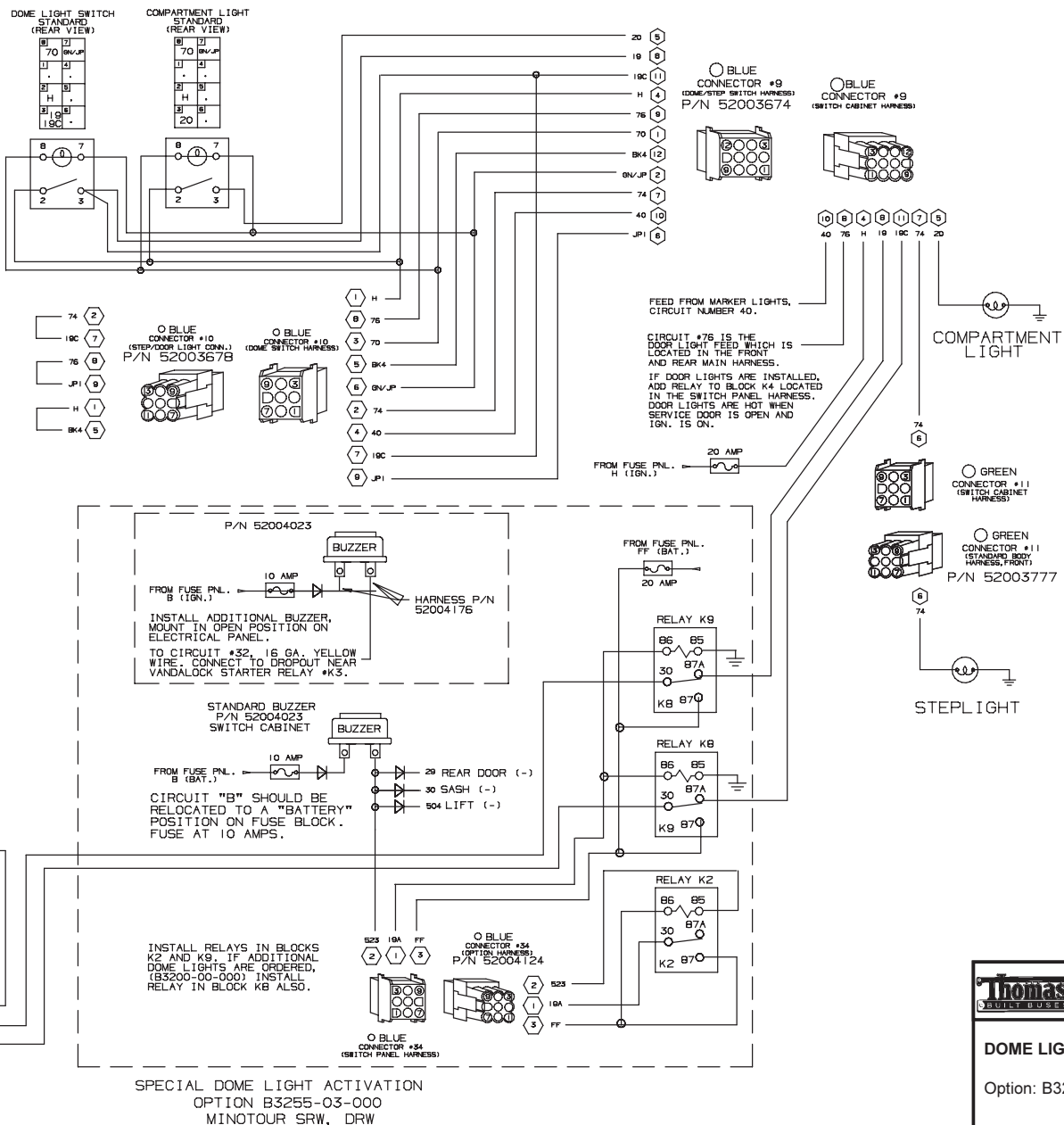


BLUE CONNECTOR #34 (OPTION HARNESS) P/N 52004124

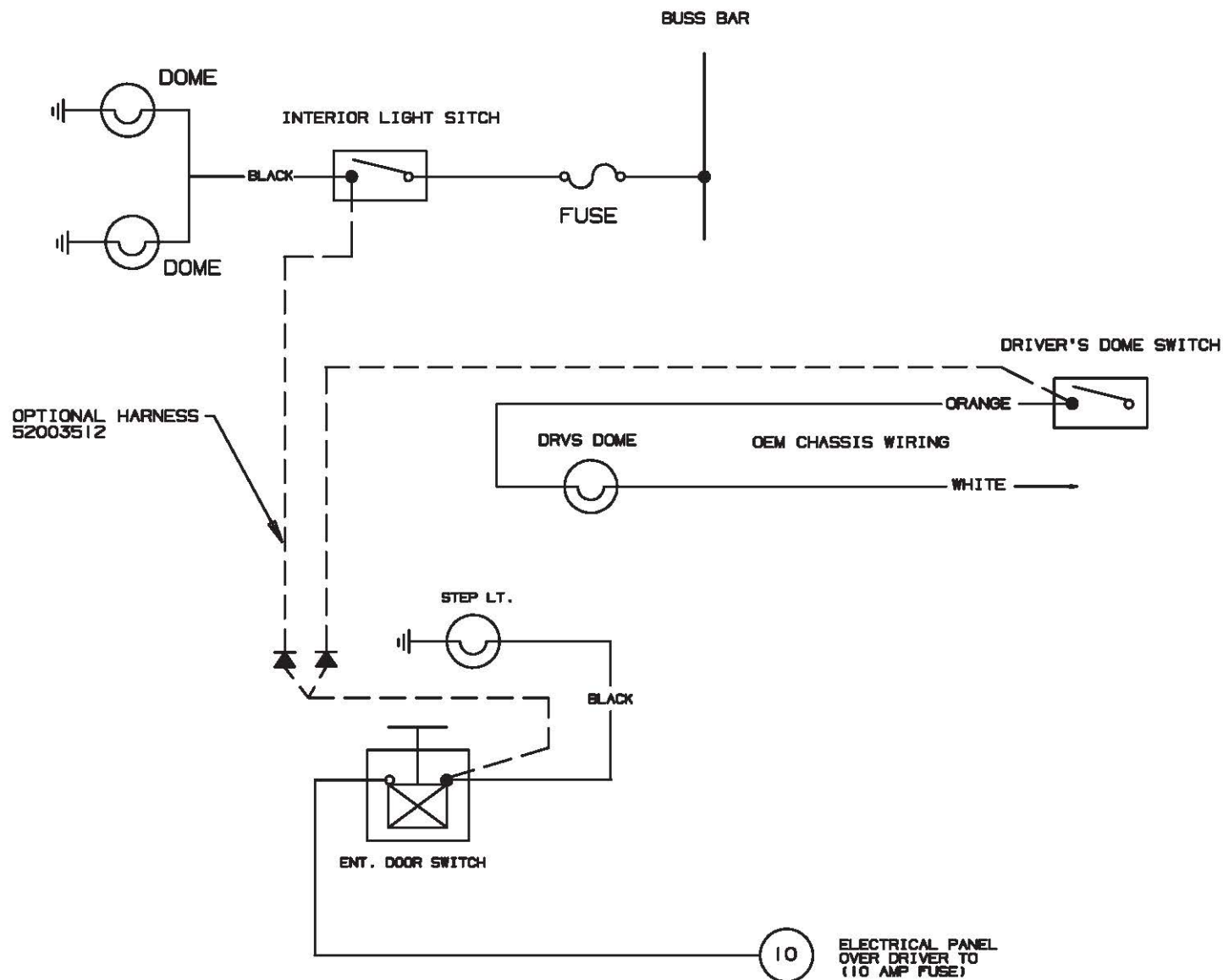


1. ALL DOME LIGHTS AND BUZZER ACTIVATED WHEN REAR DOOR IS OPENED IN ADDITION TO THEIR NORMAL ACTIVATION BY SWITCH(ES) IN SWITCH PANEL.

CONNECT TO FACTORY WIRING. FOR GM  
USE ORANGE (+) & WHITE (-), FOR FORD  
USE BLACK W/BUE STRIPE (+) AS FEED.  
CREATE GROUND. WIRING LOCATED ON DRIVERS  
SIDE B-PILLAR, BOTH CHASSIS.



# INTERIOR LIGHTING SCHEMATIC FOR OPTION B3255-04-000



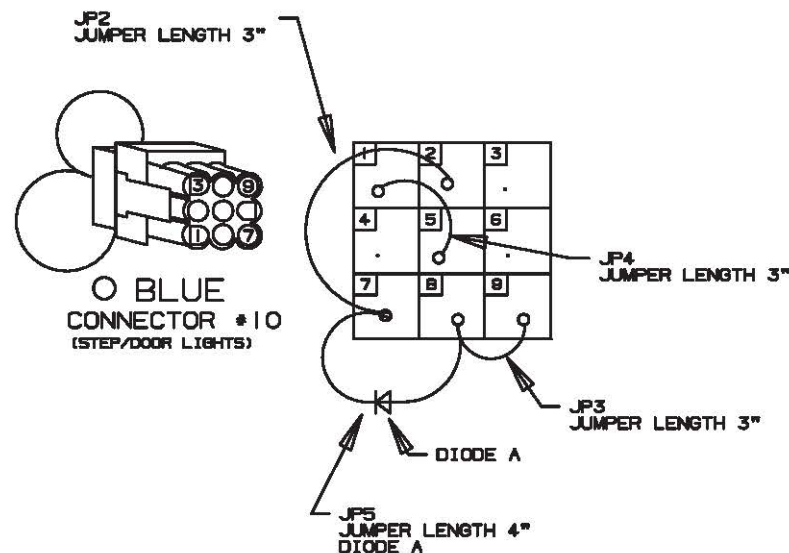
- NOTES:
1. SOLID LINES REPRESENT STANDARD WIRING.
  2. DASHED LINES REPRESENT OPTIONAL JUMPER WIRING.
  3. CONNECT DIODE END OF OPTIONAL JUMPER TO STEP LIGHT SWITCH (USE THE SAME TERMINAL AS BLACK WIRE TO STEP LIGHT).
  4. CONNECT SHORTER WIRE OF OPTIONAL JUMPER TO DRIVER'S DOME SWITCH (USE THE SAME TERMINAL AS ORANGE WIRE TO DRIVER'S DOME).
  5. CONNECT LONGER WIRE OF OPTIONAL JUMPER TO INTERIOR LIGHT SWITCH (USE THE SAME TERMINAL AS BLACK WIRE TO DOME LIGHTS).

<b>Thomas</b> SOLUTIONS	52003512 B
<b>INTERIOR LIGHTING</b>	
Option: B3255-04-000 End Date: 9/5/02	



CONN	VENDOR	PART #	DESCRIPTION	QTY
10	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	5
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	.
	AMP	770021-1	9 POSITION CONNECTOR, PLUG.	1
DIODE A	.	.	6 AMP, 400 VOLT	1

LEAD #	AWG	COLOR	DESCRIPTION
JP2	18	BLACK	JUMPER, 18C AND 74
JP3	16	BLACK	JUMPER, JP1 AND 76
JP4	18	BLACK	JUMPER, H AND BK4
JP5	16	BLACK	JUMPER, JP1 AND 76 TO 18C
.	.	.	.



5. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
  4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
  3. FULLY TAPE BREAKOUTS FOR 3"-2" SPACING OTHERWISE.
  2. TAG HARNESS FOR IDENTIFICATION.
  1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"
- NOTES: ON ALL LEADS.

STANDARD STEPLIGHT AND  
DOOR LIGHT ACTIVATION

DOOR LIGHT OPTIONS  
B32XX-XX-XXX SRW, DRW

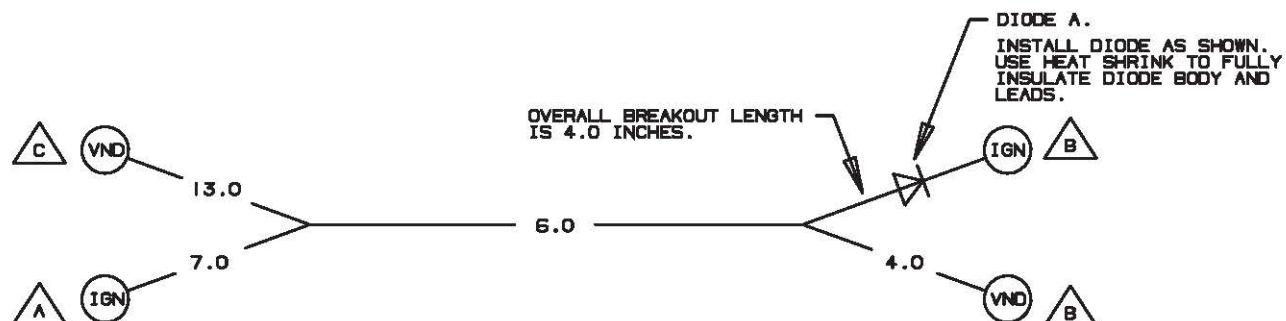
SPECIAL DOME ACTIVATION  
OPT. B3255-04-000

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	.
	VENDOR	PART #	DESCRIPTION	QTY

<b>Thomas</b> CABLES & WIRING	52003941 A
HARNESS, SPECIAL DOME LIGHT ACTIVATION	

CONN	VENDOR	PART #	DESCRIPTION	QTY
DIODE A	XX	XX	3 AMP, 400 VOLT.	1
	.	.	.	.
	.	.	.	.

LEAD #	AWG	COLOR	DESCRIPTION
VND	16	YELLOW	FROM VANDALOCK TRIGGER (-).
IGN	16	RED	FROM FUSE PANEL, IGNITION SOURCE.



- 7.SPOT TAPE HARNESS WHERE NECESSARY.  
6.WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.  
5.WHERE "X" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEEDED FOR TERMINATION.  
4.STRIP INSULATION BACK 5/8" ON UNTERMINATED LEADS.  
3.REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.  
2.TAG HARNESS FOR IDENTIFICATION.  
1.CIRCUIT NUMBERS TO BE STAMPED AT 2" INTERVALS.

NOTES:

C	XX	XX	MALE BLADE, 1/4", 14-16 GA., INS.	X
B	XX	XX	FORK SPADE, #10 STUD 14-16 GA.	X
A	XX	XX	FEMALE PUSH ON, 1/4", 14-16 GA., INS.	X
CONN	VENDOR	PART #	DESCRIPTION	QTY

<b>Thomas</b> SOLUTIONS	52004176 A
HARNESS, SPECIAL ACTI- VATION, DOME LIGHTS	

CONN	VENDOR	PART #	DESCRIPTION	QTY
1, 2, 3	CARLING	99916716001	SWITCH CONNECTOR	3
	PED	12015868	18-20 GA TERMINAL	2
	PED	12015870	14-16 GA TERMINAL	10
9	AMP	770005-1	14-20 GA. TERMINAL, PIN.	11
	AMP	770003-3	10-12 GA. TERMINAL, PIN.	.
	AMP	770029-1	12 POSITION CONNECTOR, CAP.	1
10	AMP	770005-1	14-20 GA. TERMINAL, PIN.	9
	AMP	770003-3	10-12 GA. TERMINAL, PIN.	.
	AMP	770028-1	9 POSITION CONNECTOR, CAP.	1
DIODE A	.	.	.	.
	.	.	5 AMP, 400 VOLT	4
	.	.	.	.

5. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
  4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
  3. SPIRAL TAPE BODY OF HARNESS FROM CONNECTOR 9 UP TO CONNECTOR 3.
  2. TAG HARNESS FOR IDENTIFICATION.
  1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"
- NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
H	14	RED	12V+ IGN. FROM FUSE PANEL.
BK4	18	BLACK	FROM SWITCH TO DOME RELAY (+).
40	16	BROWN/WHITE	MARKER LIGHTS FEED.
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+)
GN/JP	18	BREEN	GROUND, SWITCH LIGHT JUMPER (-).
20	16	WHITE/BLACK	FEED TO COMPARTMENT LIGHT.
19C	16	BLACK/WHITE	INTERIOR LIGHTS (REAR)
74	16	BLACK/RED	STEP LIGHTS FEED (+)
19	16	BLACK	INTERIOR LIGHTS FEED (OPT.)
76	16	BLACK/YELLOW	DOOR LIGHTS FEED (+)
JP1	16	BLACK/DRANGE	FEED FROM STEP/DOOR RELAY.
JP2	16	RED	ISOLATED FEED FROM DOME SWITCHES.
JP3	16	ORANGE	ISOLATED FEED FROM DOME CIRCUIT.
.	.	.	.
.	.	.	.
.	.	.	.

DOME LGT. SWITCH  
CONNECTOR #1  
(REAR VIEW)

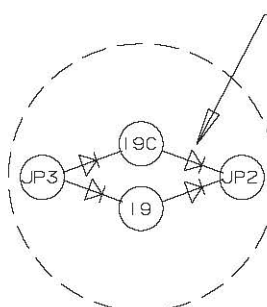
8	7
70	GN/JP
1	4
.	.
2	5
H	.
3	6
19C	.

DOME LGT. SWITCH  
CONNECTOR #2  
(REAR VIEW)

8	7
70	GN/JP
1	4
.	.
2	5
H	.
3	6
19	.

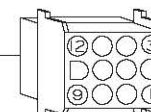
COMPARTMENT LIGHT  
CONNECTOR #3  
(REAR VIEW)

8	7
70	GN/JP
1	4
.	.
2	5
H	.
3	6
20	.



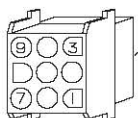
NOTE:  
CIRCUITS 19 AND 19C ORIGINATE  
IN CONNECTOR 9 AND TERMINATE  
IN CONNECTORS 1 AND 2. JP2 AND JP3  
ORIGINATE AT THIS LOCATION AND  
TERMINATE IN CONN. #10.

BLUE  
CONNECTOR #9  
(DOME/STEP HARNESS)



1	2	3
70	GN/JP	.
4	5	6
H	20	JP1
7	8	9
74	19	76
10	11	12
40	19C	BK4

BLUE  
CONNECTOR #10  
(STEP/DOOR LGT. ACT.)



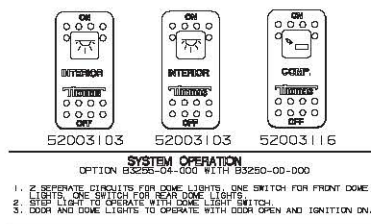
DOME/STEP LIGHTING  
OPTION B3255-04-000 IN  
COMBO WITH B3250-00-000.

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECP., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	.
	VENDOR	PART #	DESCRIPTION	QTY

52003942 A

**HARNESS, DOME  
ACTIVATION**

Option: B3255-04-000  
w/B3250-00-000



## DRIVER'S DOME



CONNECT TO FACTORY WIRING. FOR GM USE DRANGE (+) & WHITE (-). FOR FORD USE BLACK & BLUE STRIPE (+) AS FEED. CREATE GROUND. WIRING LOCATED ON DRIVERS SIDE B-PILLAR, BOTH CHASSIS.

## INTERIOR LIGHTS FRONT



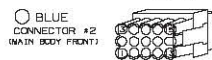
## REAR



RED CONNECTOR #16 (MAIN BODY FRONT)



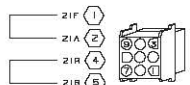
RED CONNECTOR #16 (MAIN BODY REAR)



BLUE CONNECTOR #2 (MAIN BODY FRONT)



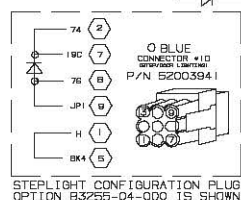
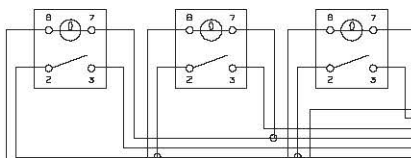
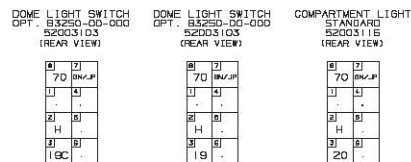
BLUE CONNECTOR #2 (SWITCH PANEL HARNESS)



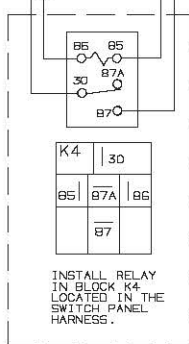
GREEN CONNECTOR #14 (STANDARD HARNESS)  
P/N 52003719



GREEN CONNECTOR #14 (SWITCH PANEL HARNESS)



20 AMP  
FROM FUSE PANEL  
H (IGN.)



P/N 52003389



FEED FROM MARKER LIGHTS, CIRCUIT NUMBER 40.

CIRCUIT #76 IS THE DOOR LIGHT FEED, WHICH IS LOCATED IN THE FRONT AND REAR MAIN HARNESS. AS STANDARD HOOK-UP, THIS CIRCUIT IS HOT WHEN THE SERVICE DOOR IS OPEN AND IGN. IS ON.

BLUE CONNECTOR #9 (DOOR/STEP SWITCH HARNESS)  
P/N 52003942

BLUE CONNECTOR #9 (SWITCH CABINET HARNESS)

COMPARTMENT LIGHT

GREEN CONNECTOR #11 (SWITCH CABINET HARNESS)

GREEN CONNECTOR #11 (STANDARD BODY HARNESS, FRONT)  
P/N 52003777

STEPLIGHT

DOOR SWITCH  
22052379  
(SHOWN WITH DOOR OPEN)

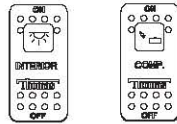
SPECIAL DOME ACT. B3255-04-000 WITH B3250-00-000  
MINOTOUR SRW, DRW

52003943 B

**DOME LIGHT**

Option: B3255-04-000





# SYSTEM OPERATION OPTION B3255-04-000

1. DOME SWITCH LOCATED IN SWITCH PANEL TO OPERATE ALL INTERIOR DOME LIGHTS (EXCEPT DRIVER DOME IN MINITOUR) WITH IGNITION ON.
2. STEP LIGHT TO OPERATE WITH DOME LIGHT SWITCH.
3. STEP AND DOME LIGHTS TO OPERATE WHEN DOOR IS OPEN AND IGNITION ON.

## DRIVER'S DOME

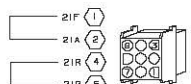
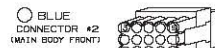
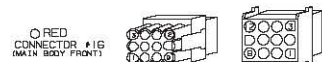


CONNECT TO FACTORY WIRING. FOR GM USE ORANGE (+) & WHITE (-). FOR FORD USE BLACK W/BLE STRIPE (+) AS FEED, CREATE GROUND WIRING LOCATED ON DRIVERS SIDE B-PILLAR, BOTH CHASSIS.

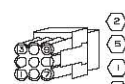
## INTERIOR LIGHTS FRONT



## REAR

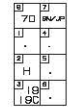


P/N 52003719

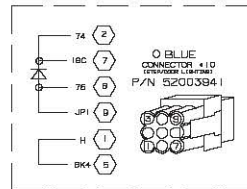
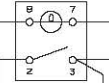


P/N 52003719

## DOME LIGHT SWITCH STANDARD (REAR VIEW)



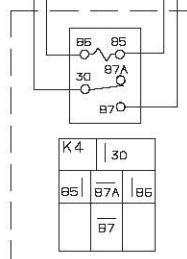
## COMPARTMENT LIGHT STANDARD (REAR VIEW)



FROM FUSE PNL.  
H (IGN.)

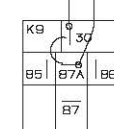
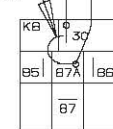
20 AMP

14 RD



INSTALL RELAY  
IN BLOCK K4  
LOCATED IN THE  
SWITCH PANEL  
HARNESS.

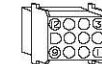
P/N 52003389



FEED FROM MARKER LIGHTS,  
CIRCUIT NUMBER 4D.

CIRCUIT #76 IS THE  
DOOR LIGHT FEED WHICH IS  
LOCATED IN THE FRONT  
AND REAR MAIN HARNESS.  
AS STANDARD HOOK-UP, THIS  
CIRCUIT IS HOT WHEN THE  
SERVICE DOOR IS OPEN AND IGN.  
IS ON.

BLUE  
CONNECTOR #9  
(DOOR/STEP SWITCH HARNESS)  
P/N 52003674



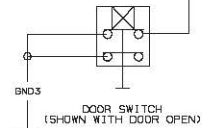
BLUE  
CONNECTOR #9  
(SWITCH CABINET HARNESS)



## COMPARTMENT LIGHT



P/N 52003777




## STEPLIGHT



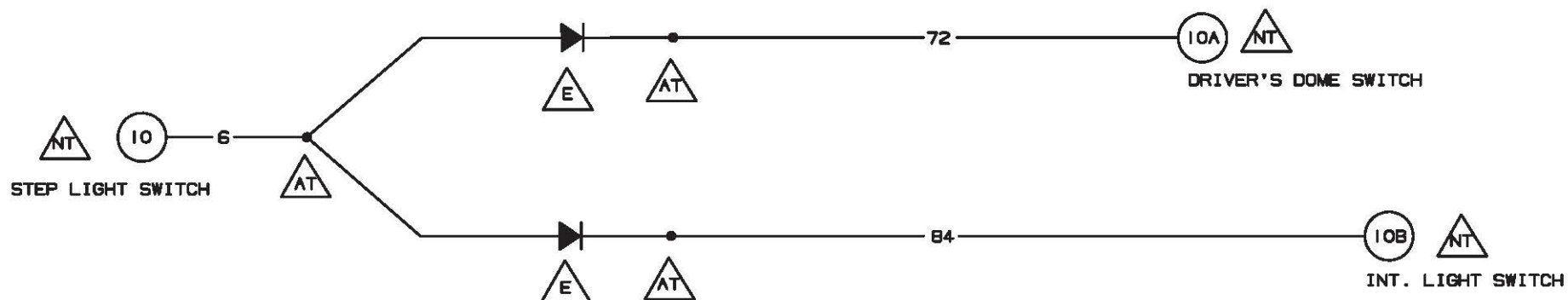
52003944 C

## DOMES LIGHTS

Option: B3255-04-000

TERMINAL 	DESCRIPTION	PART NO.	QTY.
NT	NOT TERMINATED		
AT	BUTT SPLICE, 14 AWG.	22008577	3
E	DIODE, 6 AMP, 600 VOLT	52000435	2

CIR.	AWG.	COLOR	LENGTH (IN.)	DESCRIPTION
10	16	BLACK	6	STEP LIGHT SWITCH (USE THE SAME TERMINAL AS BLACK WIRE TO STEP LIGHT)
10A	16	ORANGE	72	DRIVER'S DOME SWITCH (USE THE SAME TERMINAL AS ORANGE WIRE TO DRIVER'S DOME)
10B	16	BLACK	84	INTERIOR LIGHT SWITCH (USE THE SAME TERMINAL AS THE BLACK WIRE TO DOME LIGHTS)




#### NOTES:

1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS ON ALL LEADS.
2. TAG HARNESS FOR IDENTIFICATION.
3. WIRE CONSTRUCTION, MATERIALS, AND PRACTICES TO COMPLY WITH THE FOLLOWING STANDARDS: SAE J185, J1127, J1128. SEE ALSO DWG. \*62201005 WIRE SPECIFICATIONS.
4. ALL WIRING TO BE GXL TYPE WIRE.

#### INSTALLATION INSTRUCTIONS:

1. CONNECT DIODE END OF OPTIONAL JUMPER TO STEP LIGHT SWITCH (USE THE SAME TERMINAL AS BLACK WIRE TO STEP LIGHT).
2. CONNECT SHORTER (10A) WIRE OF OPTIONAL JUMPER TO DRIVER'S DOME SWITCH (USE THE SAME TERMINAL AS ORANGE WIRE TO DRIVER'S DOME).
3. CONNECT LONGER (10B) WIRE OF OPTIONAL JUMPER TO INTERIOR LIGHT SWITCH (USE THE SAME TERMINAL AS BLACK WIRE TO DOME LIGHTS).
4. SEE 52003512 FOR SCHEMATIC.

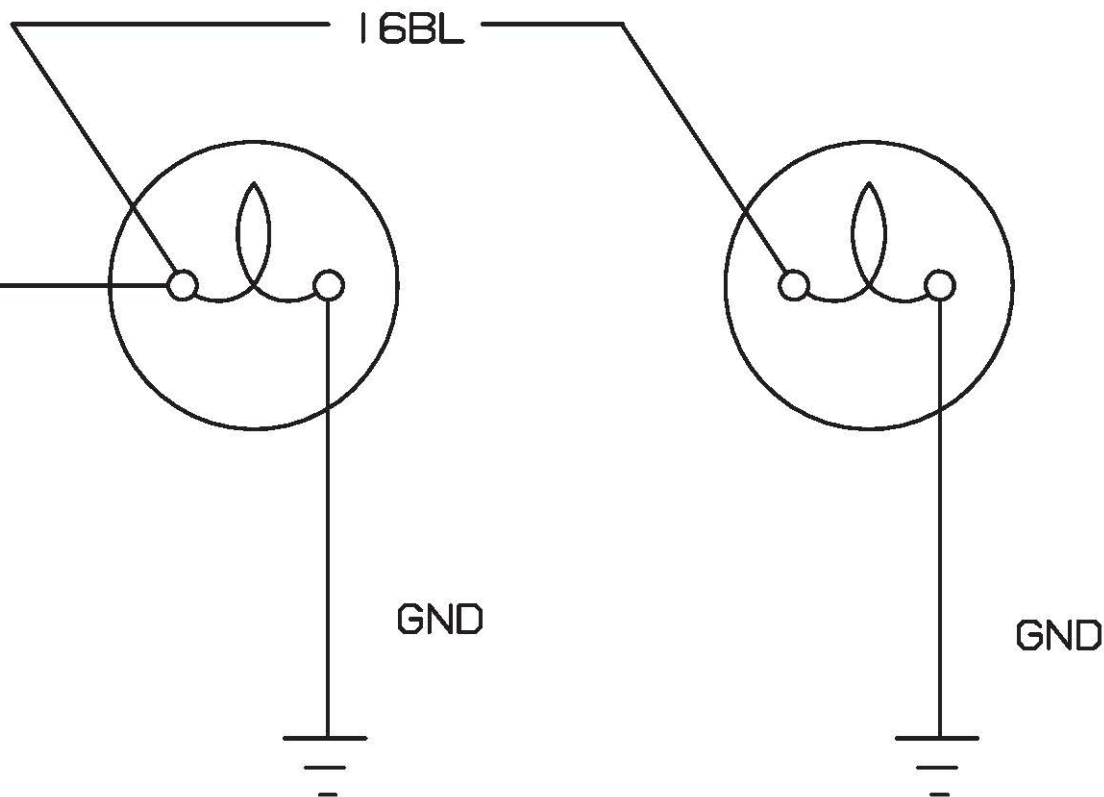
	52003514 B
HARNESS, INTERIOR LIGHT	
Option: B3255-04-000 End Date: 9/5/01	

148

FOR MVP-ER, MVP-EF,  
ER TRANSIT


426

FOR CONVENTIONAL



INTERIOR  
LIGHT  
P/N 52002578

EXTERIOR  
LIGHT  
P/N 52000118

	52003626A
LIGHTS, INTERIOR/ EXTERIOR ON A.D.A. SIDE DOOR	
Option: B3265-00-001	



[illegible]

# TERIOR LIGHTING

The diagram illustrates the electrical system for interior lighting. It features a 12V power source connected to a 15 AMP relay. The relay is controlled by a 12VH solenoid. The relay's output is connected to a 21 14BK solenoid, which in turn controls a 21 14BK solenoid. The 21 14BK solenoid is connected to a 21 14BK solenoid, which is connected to a STEPLIGHT. The STEPLIGHT is connected to ground.

12V

15 AMP

12VH

21 14BK

21 14BK

STEPLIGHT

FROM BODY SOLENOID (ACC)

CONN. #3 (INTERIOR LIGHT HARNESS)

CONN. #3 (FRONT MAIN HARNESS)

21

TO ESSEX SOLENOID

CONTACTOR

FROM BUZZER AT DOOR

REAR DOOR VANDALLOCK

OPTION #B51B5-\*\*\*-000 VANDALLOCK REAR EMERGENCY DOOR WITH INTERLOCK

Diagram illustrating five parallel wiring configurations for interior dome lights. Each configuration shows two lights connected to a common power source and ground.

- Configuration 1:** Top light connected to power, bottom light connected to ground.
- Configuration 2:** Top light connected to power, bottom light connected to ground.
- Configuration 3:** Top light connected to power, bottom light connected to ground.
- Configuration 4:** Top light connected to power, bottom light connected to ground.
- Configuration 5:** Top light connected to power, bottom light connected to ground.



CONN	VENDOR	PART #	DESCRIPTION	QTY
1, 2, 3	CARLING	98916716001	SWITCH CONNECTOR	3
	PED	XX	18-20 GA TERMINAL	X
	PED	XX	14-16 GA TERMINAL	X
9	AMP	XX	14-20 GA. TERMINAL, PIN.	X
	AMP	XX	10-12 GA. TERMINAL, PIN.	X
	AMP	770029-1	12 POSITION CONNECTOR, CAP.	1
10	AMP	XX	14-20 GA. TERMINAL, PIN.	X
	AMP	XX	10-12 GA. TERMINAL, PIN.	X
	AMP	770028-1	9 POSITION CONNECTOR, CAP.	1

- WHERE "X" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEEDED FOR TERMINATION.
- WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
- USE WIRE TIES TO HOLD HARNESS WHERE NEEDED, MINIMUM AMOUNT AND SIZE.
- REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS
- STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
- TAG HARNESS FOR IDENTIFICATION.
- CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.

NOTES:

LEAD #	AWG	COLOR	DESCRIPTION
H	14	RED	12V+ IGN. FROM FUSE PANEL.
BK4	18	BLACK	FROM SWITCH TO DOME RELAY (+).
40	16	BROWN/WHITE	MARKER LIGHTS FEED.
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+)
GN/JP	18	GREEN	GROUND, SWITCH LIGHT JUMPER (-).
74	16	BLACK/RED	STEP LIGHTS FEED (+)
19	14	BLACK	INTERIOR LIGHTS FEED (OPT.)
76	16	BLACK/YELLOW	DOOR LIGHTS FEED (+)
20	16	WHITE/BLACK	FEED TO COMPARTMENT LIGHT.
19C	16	BLACK/WHITE	INTERIOR LIGHTS (REAR)
JP1	16	BLACK/ORANGE	FEED FROM STEP/DOOR RELAY K4.
605	16	ORANGE	FROM DRIVER'S DOME LGT SWITCH TO DOME LGT
.	.	.	.
.	.	.	.

DOME LGT. SWITCH  
CONNECTOR #1  
(REAR VIEW)

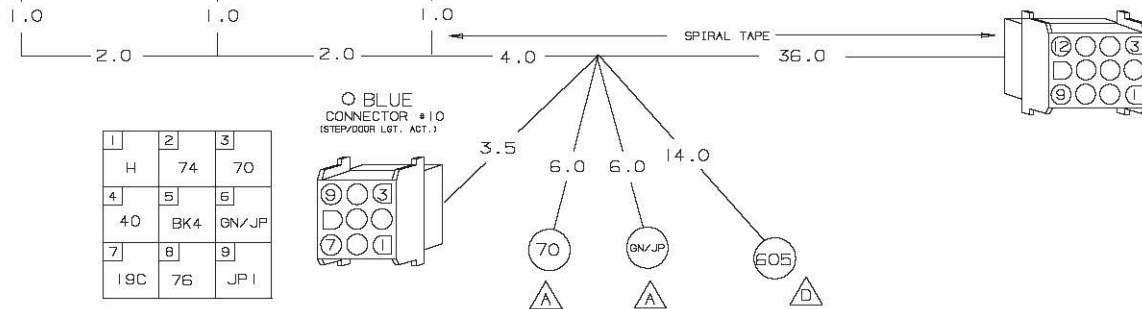
8	7
70	GN/JP
1	4
.	.
2	5
H	.
3	6
19	19C

COMPARTMENT LIGHT  
CONNECTOR #2  
(REAR VIEW)

8	7
70	GN/JP
1	4
.	.
2	5
H	.
3	6
20	.

DRIVERS DOME LGT.  
CONNECTOR #3  
(REAR VIEW)

8	7
70	GN/JP
1	4
.	.
2	5
H	.
3	6
605	.



1	2	3
70	GN/JP	.
4	5	6
H	20	JP1
7	8	9
74	19	76
10	11	12
40	19C	BK4

## DOME/STEP LIGHTING OPTION B3230-03-000 (OVERHEAD SWITCH)

D	XX	XX	BUTT SPLICE, 14-16 GA BLUE.	X
C	XX	XX	RING TERMINAL, #10 STUD, 14-16 GA.	X
B	XX	XX	MALE RECEPT., 1/4", 14-16 GA.	X
A	XX	XX	FEMALE FAST-ON, 1/4", 14-16 GA.	X
	VENDOR	PART #	DESCRIPTION	QTY

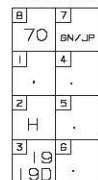
<b>Thomas</b> SOLUTIONS	<b>52004886 B</b>
<b>HARNESS, SW. WIRING, DOME AND STEP LIGHT</b>	
Option: B3230-03-000	
Effective Date: 1/29/01	
End Date: 2/18/02	

CONN	VENDOR	PART #	DESCRIPTION	QTY
1, 2, 3, 4	CARLING	99916716001	SWITCH CONNECTOR	3
	PED	XX	18-20 GA TERMINAL	X
	PED	XX	14-16 GA TERMINAL	X
9	AMP	XX	14-20 GA. TERMINAL, PIN.	X
	AMP	XX	10-12 GA. TERMINAL, PIN.	X
	AMP	770029-1	12 POSITION CONNECTOR, CAP.	1
10	AMP	XX	14-20 GA. TERMINAL, PIN.	X
	AMP	XX	10-12 GA. TERMINAL, PIN.	X
	AMP	770028-1	9 POSITION CONNECTOR, CAP.	1

- WHERE "X" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEEDED FOR TERMINATION.
- WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
- USE WIRE TIES TO HOLD HARNESS WHERE NEEDED, MINIMUM AMOUNT AND SIZE.
- REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
- STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
- TAG HARNESS FOR IDENTIFICATION.
- CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.

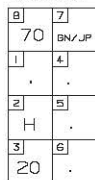
LEAD #	AWG	COLOR	DESCRIPTION
H	14	RED	12V+ IGN. FROM FUSE PANEL.
BK4	18	BLACK	FROM SWITCH TO DOME RELAY (+).
40	16	BROWN/WHITE	MARKER LIGHTS FEED.
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+)
GN/JP	18	GREEN	GROUND, SWITCH LIGHT JUMPER (-).
74	16	BLACK/RED	STEP LIGHTS FEED (+)
19	14	BLACK	INTERIOR LIGHTS FEED (OPT.)
76	16	BLACK/YELLOW	DOOR LIGHTS FEED (+)
20	16	WHITE/BLACK	FEED TO COMPARTMENT LIGHT.
19C	16	BLACK/WHITE	INTERIOR LIGHTS (REAR)
JP1	16	BLACK/ORANGE	FEED FROM STEP/DOOR RELAY K4.
605	16	ORANGE	FROM DRIVER'S DOME LGT SWITCH TO DOME LGT
19D	16	BLACK/WHITE	INTERIOR LIGHTS (REAR)
JP2	16	GREEN/WHITE	JUMPER TO DRIVER'S DOOR LIGHT SWITCH

DOME LGT. SWITCH CONNECTOR #1 (REAR VIEW)



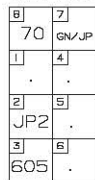
1.0

COMPARTMENT LIGHT CONNECTOR #2 (REAR VIEW)



1.0

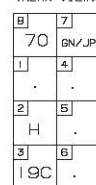
DRIVERS DOME LGT. CONNECTOR #3 (REAR VIEW)



1.0

NOTES:

INTERIOR LGT. REAR CONNECTOR #4 (REAR VIEW)



1.0

2.0

2.0

4.0

36.0

2.0

2.0

19C

A

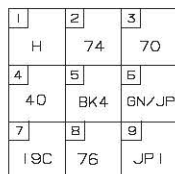
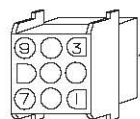
19D

B

NOTE: IF SWITCH IS NOT USED IN CONNECTOR 4. THEN PLUG JMP 19C AND 19D TOGETHER. OTHERWISE, LEAVE UNPLUGGED AND TAPED UP TO AVOID SHORTING.

NOTE: WHEN INSTALLING ON FORD CHASSIS JP2 MUST BE CONNECTED TO H. WHEN INSTALLING IN GN CHASSIS JP2 MUST BE CONNECTED TO GN/JP

BLUE CONNECTOR #10 (STEP/DOOR LGT. ACT.)

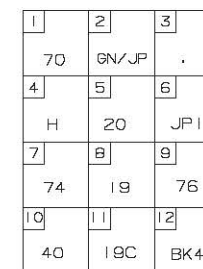
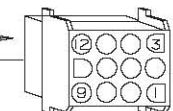


DOME/STEP LIGHTING

OPTION B3230-03-000 (OVERHEAD SWITCH)

D	XX	XX	BUTT SPLICE, 14-16 GA BLUE.	X
C	XX	XX	RING TERMINAL, *10 STUD, 14-16 GA.	X
B	XX	XX	MALE RECEP., 1/4", 14-16 GA.	X
A	XX	XX	FEMALE FAST-ON, 1/4", 14-16 GA.	X
	VENDOR	PART #	DESCRIPTION	QTY

BLUE CONNECTOR #9 (DOME/STEP HARNESS)

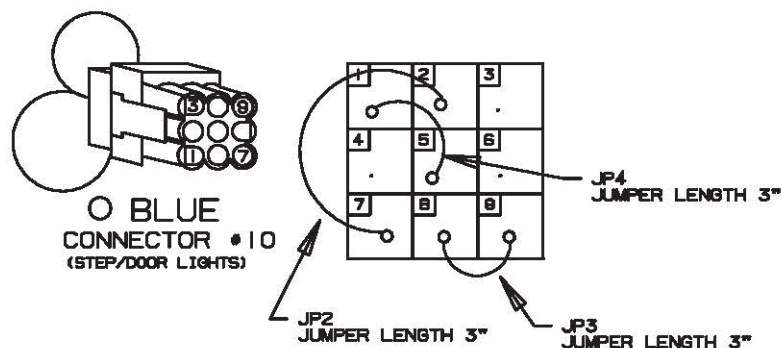


**52005329 C**

**HARNESS, STEP WIRING, DOME AND STEP LIGHT**  
Option: B3230-03-000  
Effective Date: 2/19/02  
End Date: 9/5/02

CONN	VENDOR	PART #	DESCRIPTION	QTY
10	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	5
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	.
	AMP	770021-1	8 POSITION CONNECTOR, PLUS.	1

LEAD #	AWG	COLOR	DESCRIPTION
JP2	18	BLACK	JUMPER, 19C AND 74
JP3	18	BLACK	JUMPER, JP1 AND 76
JP4	18	BLACK	JUMPER, H AND BK4
.	.	.	.
.	.	.	.



4. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
  3. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
  2. TAG HARNESS FOR IDENTIFICATION.
  1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"
- NOTES: ON ALL LEADS.

STANDARD STEPLIGHT AND  
DOOR LIGHT ACTIVATION

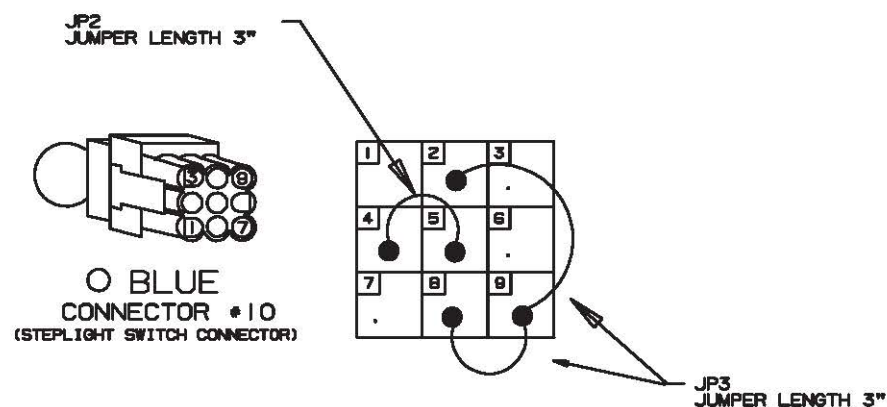
DOOR LIGHT OPTIONS  
B32XX-XX-XXX SRW, DRW

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	.
	VENDOR	PART #	DESCRIPTION	QTY

<b>Thomas</b> SOLUTIONS	52003678 C
HARNESS, STANDARD DOME/STEP LIGHT ACTIVATION Option: B32XX-XX-XXX End Date: 9/5/02	

CONN	VENDOR	PART #	DESCRIPTION	QTY
10	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	5
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	.
	AMP	770021-1	9 POSITION CONNECTOR, PLUS.	1

LEAD #	AWG	COLOR	DESCRIPTION
JP2	16	BLACK	JUMPER, 40 AND BK4
JP3	16	BLACK	JUMPER, 74, 76, AND JP1.
.	.	.	.
.	.	.	.



4. STRIP INSULATION BACK 3/8" ON  
UNTERMINATED LEADS.

3. REFER TO DWG. #52001136 FOR HARNESS  
SPECIFICATIONS.

2. TAG HARNESS FOR IDENTIFICATION.

1. CIRCUIT NUMBERS TO BE STAMPED AT  
4" INTERVALS WITH THE PREFIX "B"

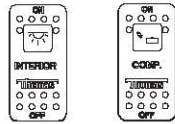
NOTES: ON ALL LEADS.

STEPLIGHT ACTIVATION  
OPTION B3290-00-000

DOOR LIGHT OPTIONS  
B32XX-XX-XXX

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	.
	VENDOR	PART #	DESCRIPTION	QTY

<b>Thomas</b> SOLUTIONS	52003677 C
HARNESS, DOME/STEP LIGHT	
Option: B3290-00-000 End Date: 9/5/02	



### SYSTEM OPERATION

1. DOME SWITCH LOCATED IN SWITCH PANEL TO OPERATE ALL INTERIOR DOME LIGHTS (EXCEPT DRIVER DOME OR MINOTOUR) WITH IGNITION ON.
2. STEP LIGHT TO OPERATE ONLY WHEN ENTRANCE IS OPEN AND MARKER LIGHTS ON.
3. DOOR LIGHTS OPERATE THROUGH STEP LIGHT CIRCUIT.

### DRIVER'S DOME



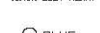
CONNECT TO FACTORY WIRING. FOR BU USE GRABE (+) & WHITE (-). FOR FORD USE BLACK & BLUE STRIPE (+) AS FEED. CREATE GROUND. WIRING LOCATED IN DRIVERS SIDE B-PILLAR, BOTH CHASSIS.

### INTERIOR LIGHTS FRONT

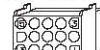
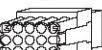


### REAR

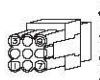
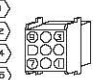
RED CONNECTOR #16 (MAIN BODY FRONT)



BLUE CONNECTOR #2 (MAIN BODY FRONT)

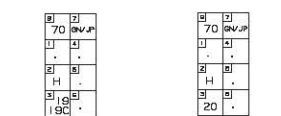


GREEN CONNECTOR #14 (STANDARD HARNESS) P/N 52003719

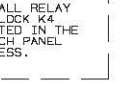
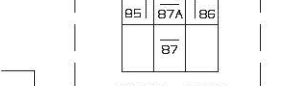
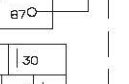
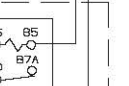
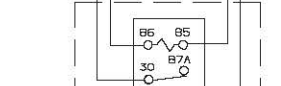
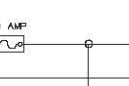
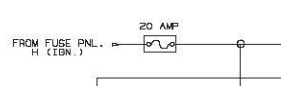
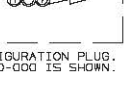
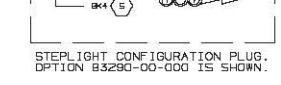
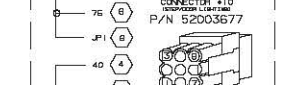
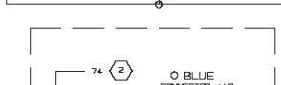
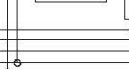
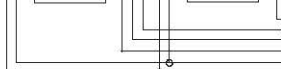
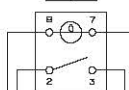
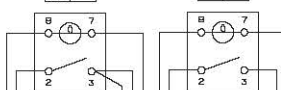
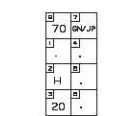


GREEN CONNECTOR #14 (SWITCH PANEL HARNESS)

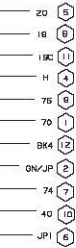
### DOMES LIGHT SWITCH STANDARD (REAR VIEW)



### COMPARTMENT LIGHT STANDARD (REAR VIEW)

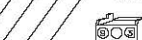
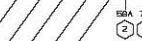
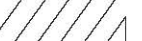
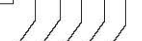
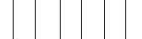
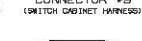
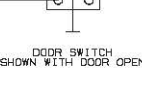
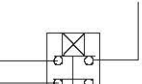
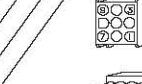
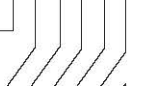
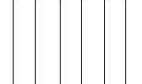


STANDARD DOME/DOOR LIGHTS W/STEP OPT. B3290-00-000  
MINOTOUR SRW, DRW

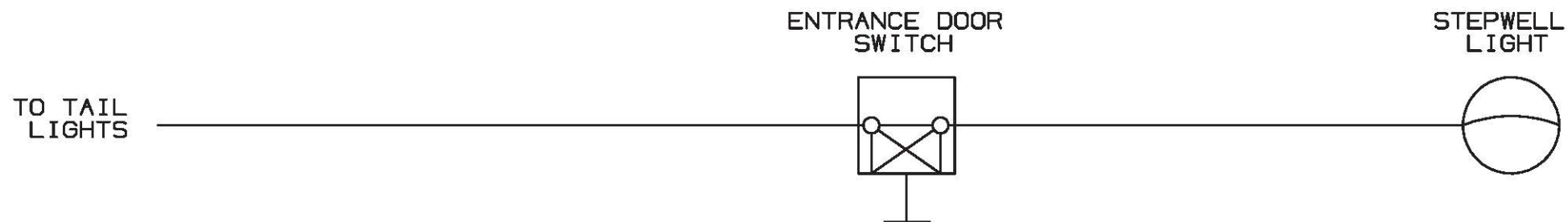


BLUE CONNECTOR #9 (DOOR/STEP SWITCH HARNESS) P/N 52003674

BLUE CONNECTOR #9 (SWITCH CABINET HARNESS)




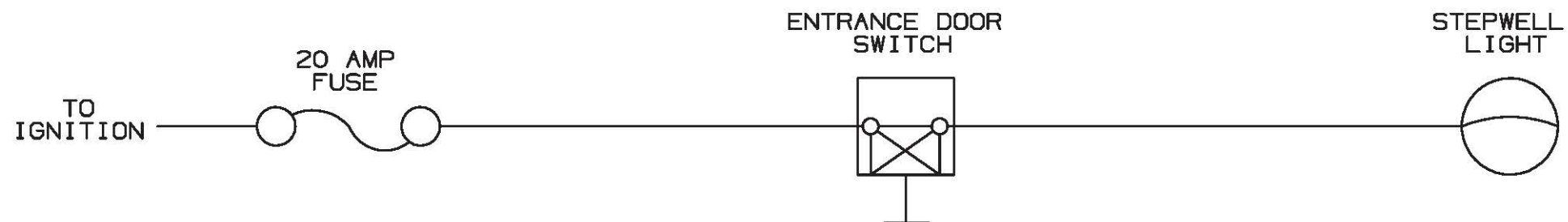




OPTION B3290-00-000


SWITCH ENABLING STEP LIGHT TO OPERATE  
AUTOMATICALLY WHEN ENTRANCE DOOR IS  
OPENED AND MARKER LIGHTS ARE ON.

	80520360 A
STEP LIGHT SWITCH	



OPTION B3290-02-000

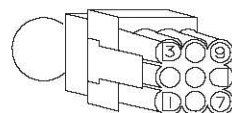
SWITCH ENABLING STEP LIGHT TO OPERATE  
AUTOMATICALLY WHEN ENTRANCE DOOR IS  
OPENED AND IGNITION SWITCH IS ON.

	80520360 A
STEP LIGHT SWITCH	

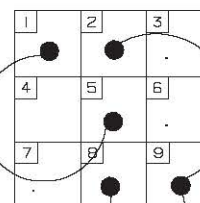
CONN	VENDOR	PART #	DESCRIPTION	QTY
10	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	5
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	.
	AMP	770021-1	9 POSITION CONNECTOR, PLUG.	1

LEAD #	AWG	COLOR	DESCRIPTION
JP2	18	BLACK	JUMPER, H AND BK4
JP3	16	BLACK	JUMPER, 74, 76, AND JP1.
.	.	.	.
.	.	.	.

JP2  
JUMPER LENGTH 3"



O BLUE  
CONNECTOR #10  
(STEPLIGHT SWITCH CONNECTOR)




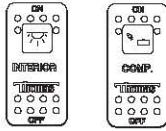
JP3  
JUMPER LENGTH 3"

5. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
  4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
  3. FULLY TAPE BREAKOUTS FOR 3"-2" SPACING OTHERWISE.
  2. TAG HARNESS FOR IDENTIFICATION.
  1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"
- NOTES: ON ALL LEADS.

STEPLIGHT ACTIVATION  
OPTION B3290-02-000  
DOOR LIGHT OPTIONS  
B32XX-XX-XXX

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	.
	VENDOR	PART #	DESCRIPTION	QTY

	<b>52003931 B</b>
<b>HARNESS, STEP LIGHT</b>	
Option: B3290-02-000 End Date: 9/5/02	



# SYSTEM OPERATION

1. DOME SWITCH LOCATED IN SWITCH PANEL TO OPERATE ALL INTERIOR DOME LIGHTS. (EXCEPT DRIVER DOME ON MINOTOUR) WITH IGNITION ON.
2. STEPLIGHT TO OPERATE ONLY WHEN ENTRANCE IS OPEN AND IGNITION SWITCH IS ON.
3. DOOR LIGHTS OPERATE THROUGH STEP LIGHT CIRCUIT.

## DRIVER'S DOME



CONNECT TO FACTORY WIRING. FOR BW USE ORANGE (+) & WHITE (-), FOR FORD USE BLACK W/BUE STRIPE (+) AS FEED. CREATE GROUND. WIRING LOCATED ON DRIVERS SIDE B-PILLAR, BOTH CHASSIS.

## INTERIOR LIGHTS FRONT



## REAR



RED CONNECTOR #15 (MAIN BODY FRONT)



RED CONNECTOR #16 (MAIN BODY REAR)

BLUE CONNECTOR #2 (SWITCH PANEL HARNESS)

BLUE CONNECTOR #2 (MAIN BODY FRONT)



GREEN CONNECTOR #14 (STANDARD HARNESS)



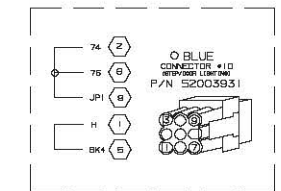
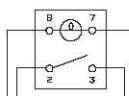
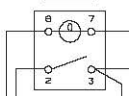
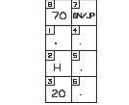
P/N 52003719

GREEN CONNECTOR #14 (SWITCH PANEL HARNESS)

DOME LIGHT SWITCH STANDARD (REAR VIEW)



COMPARTMENT LIGHT STANDARD (REAR VIEW)



STEP LIGHT CONFIGURATION PLUG: OPTION B3290-02-000 IS SHOWN.

FROM FUSE PNL. H (IGN.)



20 AMP

H 14 RD

21B 21A

2 1

21B 21A

21B 21A

14 13

21B 21A

14 13

21B 21A

14 13

21B 21A

14 13

21B 21A

14 13

21B 21A

14 13

21B 21A

14 13

STEP LIGHT OPTION B3290-02-000 MINOTOUR SRW, DRW

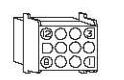
P/N 520033B9



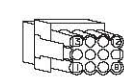
FEED FROM MARKER LIGHTS, CIRCUIT NUMBER 40.

CIRCUIT #76 IS THE DOOR LIGHT FEED WHICH IS LOCATED IN THE FRONT AND REAR MAIN HARNESS. AS STANDARD HOOK-UP, THIS CIRCUIT IS HOT WHEN THE SERVICE DOOR IS OPEN AND IGN. IS ON.

BLUE CONNECTOR #9 (DOOR/STEP SWITCH HARNESS) P/N 52003674



BLUE CONNECTOR #9 (SWITCH CABINET HARNESS)



COMPARTMENT LIGHT



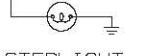
GREEN CONNECTOR #11 (SWITCH CABINET HARNESS)



GREEN CONNECTOR #11 (STANDARD BODY HARNESS, FRONT) P/N 52003777



STEPLIGHT



DOOR SWITCH (SHOWN WITH DOOR OPEN)



52003932 E

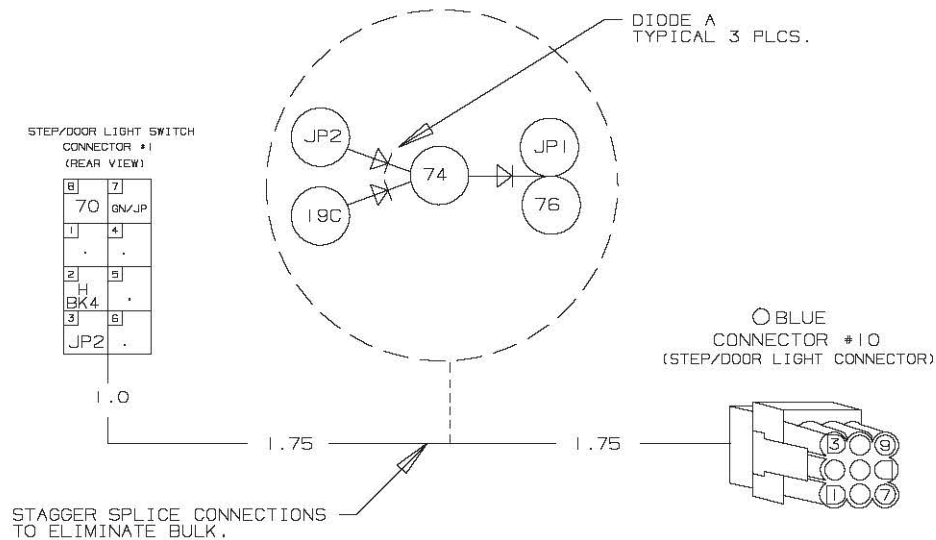
## STEP LIGHT

Option: B3290-02-000  
End Date: 9/5/02

CONN	VENDOR	PART #	DESCRIPTION	QTY
I	CARLING	99916716001	SWITCH CONNECTOR	1
	PED	12015869	18-20 GA TERMINAL	2
	PED	12015870	14-16 GA TERMINAL	2
IO	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	8
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	.
	AMP	770021-1	9 POSITION CONNECTOR, PLUG.	1
DIODE A	.	.	.	.
	.	.	6 AMP, 400 VOLT	3
	.	.	.	.

5. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
  4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
  3. SPIRAL TAPE HARNESS FROM CONN. IO TO CONN. I
  2. TAG HARNESS FOR IDENTIFICATION.
  1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"
- NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
JP1	16	BLACK/ORANGE	FROM STEP/DOOR RELAY.
74	16	BLACK/RED	STEP LIGHTS FEED (+).
19C	16	BLACK/WHITE	DOVE FEED (REAR) THROUGH DIODE.
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+)
GN/JP	18	GREEN	GROUND, SWITCH LIGHT JUMPER (-).
H	14	RED	TO FUSE PNL. (IGN.)
BK4	18	BLACK	FROM SWITCH TO STEPLIGHT RELAY.
76	16	BLACK/YELLOW	DOOR LIGHTS FEED (+)
JP2	16	RED	JUMPER, SWITCH TO 74 THRU DIODE.



1	2	3
H	74	70
4	5	6
.	BK4	GN/JP
7	8	9
19C	76	JP1

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	.
	VENDOR	PART #	DESCRIPTION	QTY

STEP/DOOR OPTION  
B3290-03-000 SRW, DRW

<b>Thomas</b> CABLES & CONNECTORS	52003686 A
<b>HARNESS, STEP/DOOR COMBINATION</b>	
Option: B3290-03-000	





#### SYSTEM OPERATION

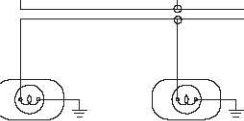
1. DOME SWITCH LOCATED IN SWITCH PANEL TO OPERATE ALL INTERIOR DOME LIGHTS (EXCEPT DRIVER DOME ON MINITOUR) WITH IGNITION ON.
2. STEPLIGHT AND DOOR LIGHTS TO OPERATE WITH SWITCH IN SWITCH PANEL IN CONJUNCTION WITH STANDARD OPERATION.

#### DRIVER'S DOME

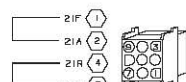
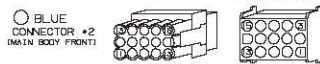
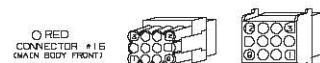


CONNECT TO FACTORY WIRING. FOR GM USE ORANGE (+) & WHITE (-). FOR FORD USE BLACK W/BLEU STRIPE (+) AS FEED. CREATE GROUND WIRING LOCATED ON DRIVERS SIDE B-PILLAR, BOTH CH88515.

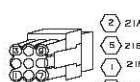
#### INTERIOR LIGHTS FRONT



#### REAR

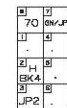


GREEN CONNECTOR #14 (STANDARD HARNESS) P/N 52003719



GREEN CONNECTOR #14 (SWITCH PANEL HARNESS)

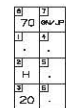
#### STEP/DOOR SWITCH (REAR VIEW)



#### DOME LIGHT SWITCH STANDARD (REAR VIEW)

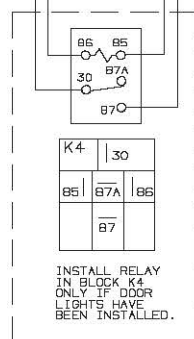


#### COMPARTMENT LIGHT STANDARD (REAR VIEW)



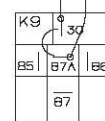
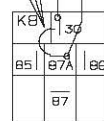
FROM FUSE PNL. H (IGN.)

20 AMP



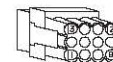
INSTALL RELAY IN BLOCK K4 ONLY IF DOOR LIGHTS HAVE BEEN INSTALLED.

P/N 52003388



BLUE CONNECTOR #9 (DOOR/STEP SWITCH HARNESS) P/N 52003674

BLUE CONNECTOR #9 (SWITCH CABINET HARNESS)



FEED FROM MARKER LIGHTS, CIRCUIT NUMBER 40.

CIRCUIT #78 IS THE DOOR LIGHT FEED WHICH IS LOCATED IN THE FRONT AND REAR MAIN HARNESS. FOR OPTION B3290-03-000, THIS CIRCUIT IS HOT WHEN THE SERVICE DOOR IS OPEN AND IGN. ON, OR STEP/DOOR SWITCH IS PRESSED.

COMPARTMENT LIGHT

GREEN CONNECTOR #11 (SWITCH CABINET HARNESS)

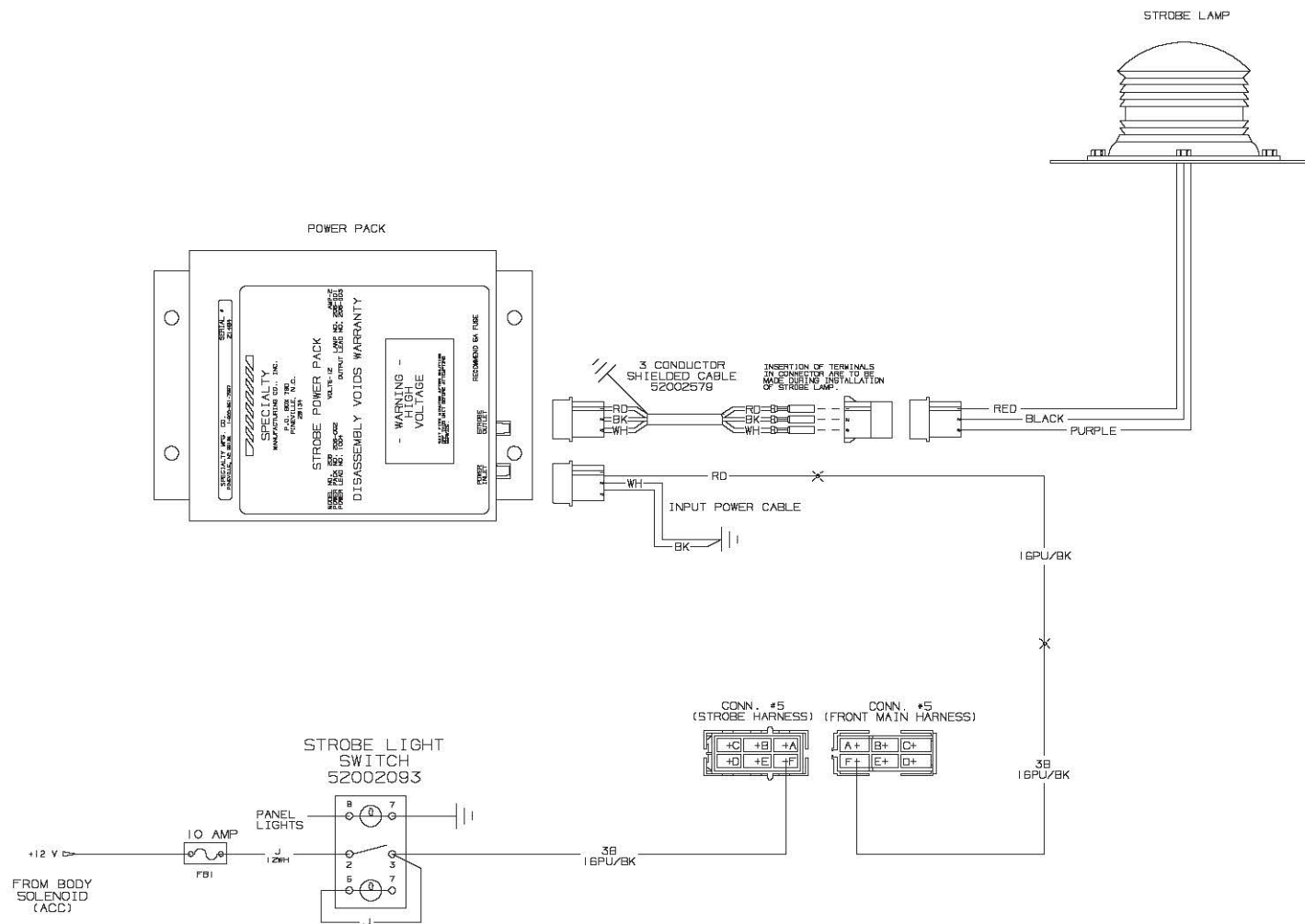
GREEN CONNECTOR #11 (STANDARD BODY HARNESS, FRONT) P/N 52003777

STEPLIGHT

DOOR SWITCH (SHOWN WITH DOOR OPEN)

STANDARD DOME W/STEP/DOOR LIGHT OPT. B3290-03-000 MINITOUR SRW, DRW

	<b>52003697 C</b>
<b>STEP LIGHT</b>	
Option: B3290-03-000	



NOTES:  
1. POWER PACK, STROBE LAMP, INPUT POWER CABLE, AND AMP CONNECTOR ARE PART OF KIT #52002574.



52002582 A

STROBE LIGHT, ROOF MOUNTED, SPECIALTY MODEL #205-202

CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLING	98916716001	SWITCH CONNECTOR	1
	PED	12015869	18-20 GA TERMINAL	2
	PED	12015870	14-16 GA TERMINAL	3
4	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	4
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	.
	AMP	770021-1	9 POSITION CONNECTOR, PLUG.	1
RELAY K1	HELLA	B7122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

5. STRIP INSULATION BACK 3/8" ON  
 UNTERMINATED LEADS.  
 4. REFER TO DWG. #52001136 FOR HARNESS  
 SPECIFICATIONS.  
 3. FULLY TAPE BREAKOUTS FOR 3"-  
 2" SPACING OTHERWISE.  
 2. TAG HARNESS FOR IDENTIFICATION.  
 1. CIRCUIT NUMBERS TO BE STAMPED AT  
 4" INTERVALS WITH THE PREFIX "B"  
 NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+)
GN/JP	18	GREEN	GROUND, SWITCH LIGHT JUMPER (-).
R	14	RED	FROM FUSE PNL. (IGN.) 12V+
3B	16	PURPLE/BLACK	STROBE LIGHT FEED (12V+)
.	.	.	.
.	.	.	.

STEP/DOOR LIGHT SWITCH  
 CONNECTOR #1  
 (REAR VIEW)

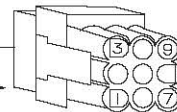
6	7
70	GN/JP
1	4
.	.
2	5
R	.
3	6
3B	3B

1.0

48.0

SPIRAL TAPE


BLUE  
 CONNECTOR #4  
 (STROBE LIGHT CONNECTOR)



1	2	3
.	.	R
4	5	6
70	GN/JP	3B
7	8	9
.	.	.

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	.
	VENDOR	PART #	DESCRIPTION	QTY

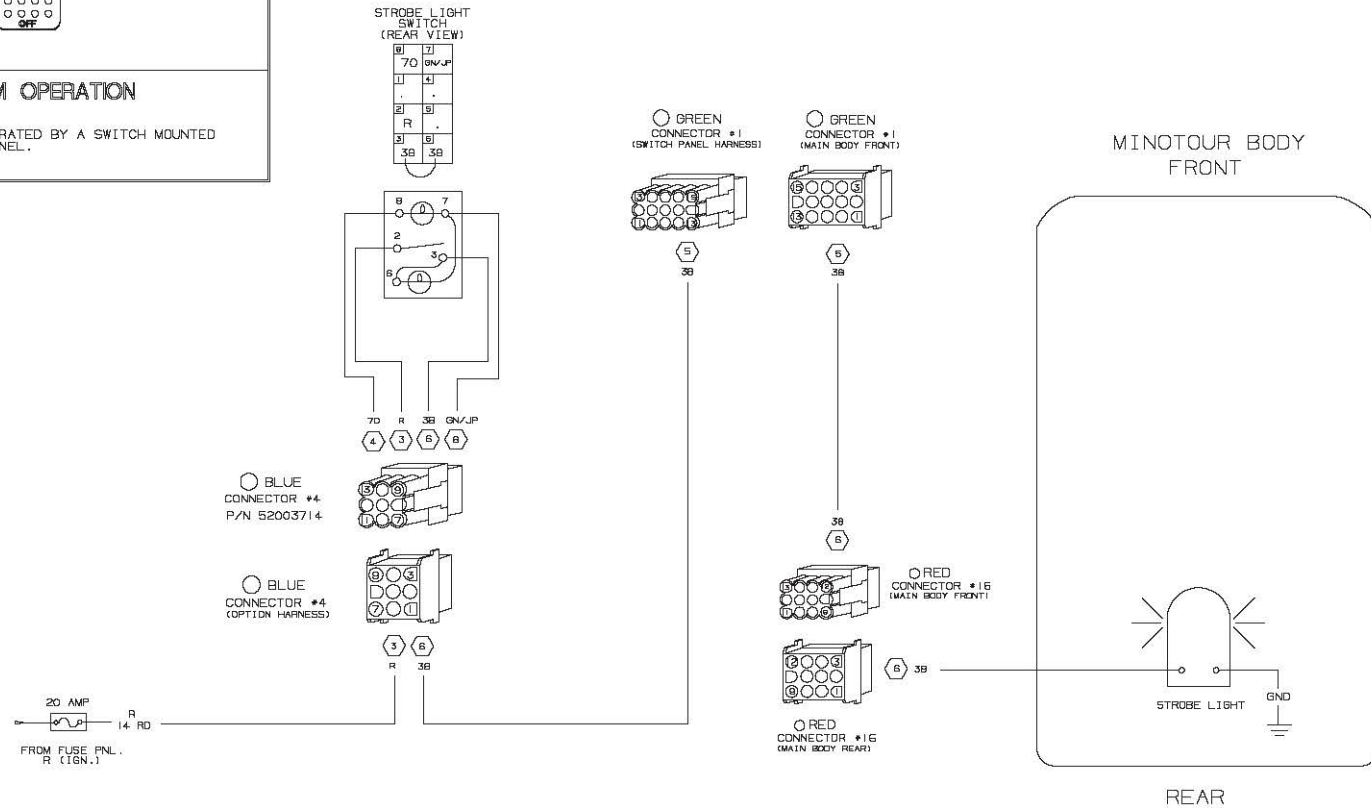
STROBE LIGHT WIRING  
 NORMAL OPERATION (SWITCH ONLY)  
 MINOTOUR SRW, DRW

	52003714 B
HARNESS, STROBE LIGHT NORMAL OPERATION	
End Date: 9/6/02	



## SYSTEM OPERATION

1. STROBE LIGHT OPERATED BY A SWITCH MOUNTED ON THE SWITCH PANEL.



STROBE LIGHT ACTIVATION  
NORMAL OPERATION  
MINOTOUR SRW, DRW

<b>Thomas</b> SOUND & LIGHT	52003717 D
<b>STANDARD STROBE LIGHT</b>	
End Date: 9/6/02	

CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLING	98916716001	SWITCH CONNECTOR	1
	PED	12015868	18-20 GA TERMINAL	2
	PED	12015870	14-16 GA TERMINAL	4
4	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL	5
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL	.
	AMP	770021-1	9 POSITION CONNECTOR, PLUG.	1
RELAY K1	HELLA	B7122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

5. STRIP INSULATION BACK 3/8" ON  
 UNTERMINATED LEADS.  
 4. REFER TO DWG. #52001136 FOR HARNESS  
 SPECIFICATIONS.  
 3. FULLY TAPE BREAKOUTS FOR 3"-  
 2" SPACING OTHERWISE.  
 2. TAG HARNESS FOR IDENTIFICATION.  
 1. CIRCUIT NUMBERS TO BE STAMPED AT  
 4" INTERVALS WITH THE PREFIX "B"  
 NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
B2	16	BLUE	FROM WARNING FLASHER, STOP ARM (+)
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+)
GN/JP	18	GREEN	GROUND, SWITCH LIGHT JUMPER (-).
R	16	RED	FROM FUSE PANEL (IGN.)
BK3	18	BLACK/RED	TO STROBE RELAY, (+) TRIGGER.
.	.	.	.

STEP/DOOR LIGHT SWITCH  
 CONNECTOR #1  
 (REAR VIEW)

8	7
70	GN/JP
1	4
BK3	.
2	5
B2	R
3	6
.	BK3


BLUE  
 CONNECTOR #4  
 (STROBE LIGHT CONNECTOR)

1	2	3
B2	BK3	R
4	5	6
70	GN/JP	.
7	8	9
.	.	.

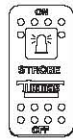


D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	.
	VENDOR	PART #	DESCRIPTION	QTY

STROBE LIGHT WIRING  
 B3576-00-000 SRW, DRW

	52003711 A
HARNESS, STROBE LIGHT	
Option: B3576-00-000	

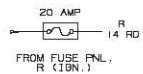
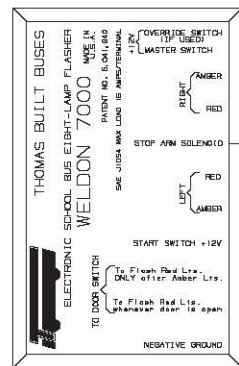




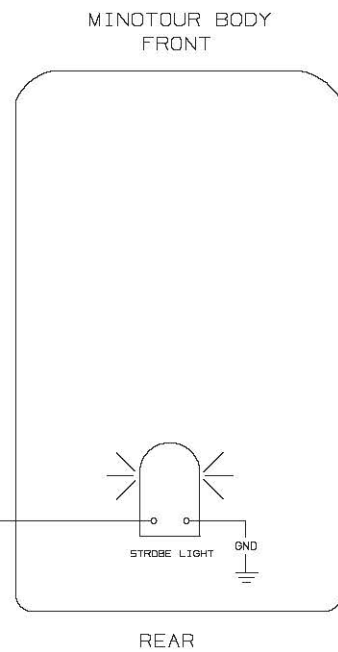
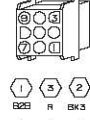
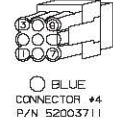
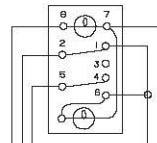
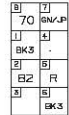
## SYSTEM OPERATION

B3576-00-000

1. STROBE LIGHT TO BE OPERATED BY SWITCH LOCATED ON SWITCH PANEL, OR WHEN RED WARNING LIGHTS ARE ACTIVATED BY DOOR SWITCH.



STROBE LIGHT SWITCH (REAR VIEW)



STROBE LIGHT ACTIVATION  
OPTION B3576-00-000  
MINOTOUR SRW, DRW



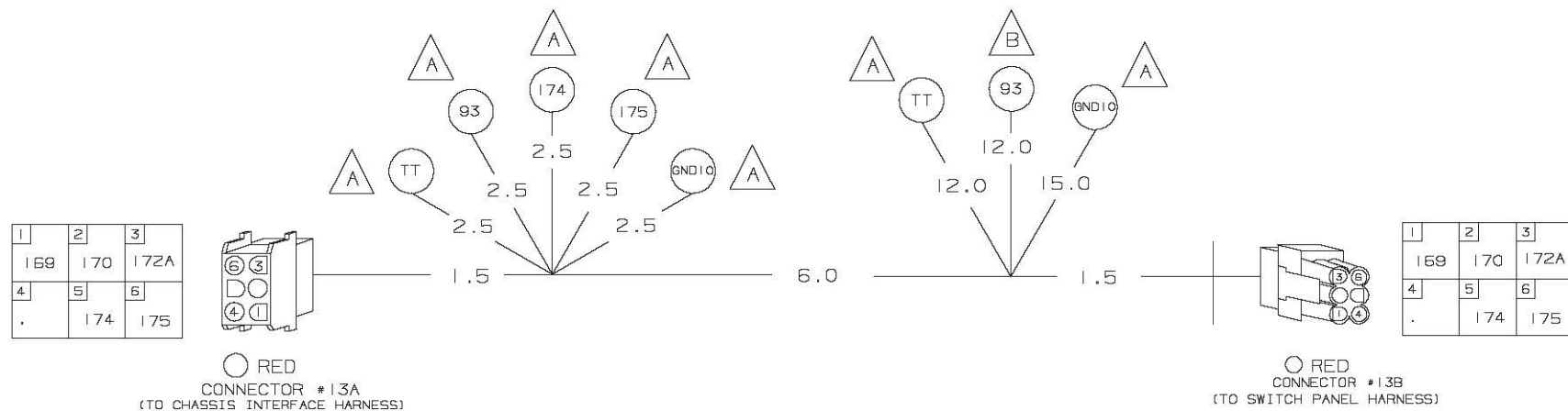
52003715 C

## STROBE LIGHT

Option: B3576-00-000

CONN	VENDOR	PART #	DESCRIPTION	QTY
13A	AMP	770027-1	6 POSITION CONNECTOR, CAP	1
	AMP	770005-1	14-16 GA TERMINAL, PIN.	5
	AMP	770003-3	10-12 GA TERMINAL, PIN.	.
13B	AMP	770020-1	6 POSITION CONNECTOR, PLUG	1
	AMP	770006-3	14-16 GA TERMINAL, RECEPT.	5
	AMP	770004-3	10-12 GA TERMINAL, RECEPT.	.

LEAD #	AWG	COLOR	DESCRIPTION
93	16	BLACK	FEED FROM STROBE RELAY TO SWITCH.
169	16	BROWN	PARKING LIGHT CIRCUIT.
170	14	BLUE/WHITE	LIGHT MONITOR FEED, REVERSE LIGHTS.
172A	16	WHITE	BRAKE LIGHT RELAY FEED.
174	16	YELLOW	LIGHT MONITOR FEED, LEFT TURN SIGNAL.
175	16	DARK GREEN	LIGHT MONITOR FEED, RIGHT TURN SIGNAL.
TT	14	RED	FUSE PANEL TO STROBE RELAY.
GND10	16	WHITE	STROBE RELAY GROUND.

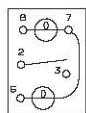


4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.  
3. FULLY TAPE BREAKOUTS FOR 3"-2" SPACING OTHERWISE.  
2. TAG HARNESS FOR IDENTIFICATION.  
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.

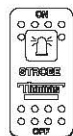
.	.	.
B	14-16 AWG TERMINAL (AMP P/N 770006-3)	1
A	FEMALE FASTON, 1/4"., 14-16 GA.	7
TERM	DESCRIPTION	QTY.

OPT. B3576-01-000  
MINOTOUR SRW, DRW

<b>Thomas</b> SOLUTIONS	52004002 B
<b>HARNESS, STROBE LIGHT</b>	
End Date: 9/6/02	

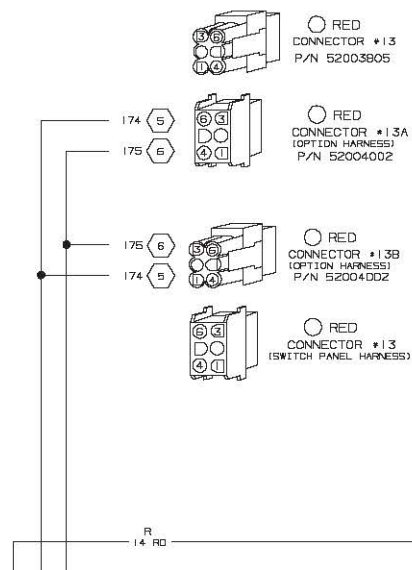


CIRCUIT



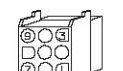
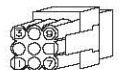
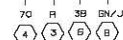
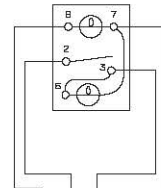
## SYSTEM OPERATION

1. STROBE LIGHT OPERATED WITH THE HAZARD LIGHTS BY A SWITCH MOUNTED ON THE SWITCH PANEL.



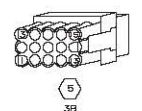
NOTE:  
REMOVE WIRE R FROM IT'S CONNECTION TO FUSE PANEL.  
CONNECT IT TO THE S TERMINAL ON THE STROBE RELAY.  
THEN, CONNECT THE + TERMINAL OF THE STROBE RELAY  
TO TERMINAL TT ON FUSE PANEL.

STROBE LIGHT SWITCH  
(REAR VIEW)

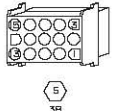


STROBE LIGHT ACTIVATION  
OPT.B3576-01-000  
MINOTOUR SRW, DRW

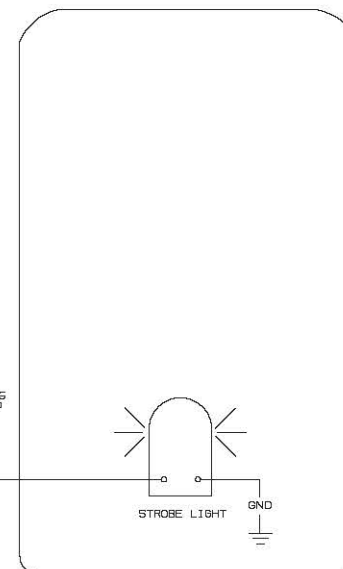
GREEN  
CONNECTOR #1  
(SWITCH PANEL HARNESS)




GREEN  
CONNECTOR #1  
(MAIN BODY FRONT)



MINOTOUR BODY  
FRONT



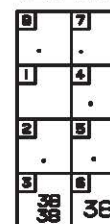
REAR

	52004001 C
STROBE LIGHT	
Option: B3576-01-000	
End Date: 9/6/02	

CONN	VENDOR	PART #	DESCRIPTION	QTY
40	CARLING	99816718001	SWITCH CONNECTOR	1
	PED	12084590	10-12 GA TERMINAL	1
	PED	12018870	14-16 GA TERMINAL	1

LEAD #	AWG	COLOR	DESCRIPTION
38	16	PURPLE/BLACK	STROBE LIGHT
.	.	.	.
.	.	.	.
.	.	.	.

STROBE LIGHT  
CONNECTOR #29  
(REAR VIEW)




5. STRIP INSULATED BACK 3/8" ON UNTERMINATED LEADS.
  4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
  3. FULLY TAPE BREAKOUTS FOR 3"-2" SPACING OTHERWISE.
  2. TAG HARNESS FOR IDENTIFICATION.
  1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"
- NOTES: ON ALL LEADS.

CONNECTOR # 4 CAVITY # 7   11.0

OPTION: B37XX-XX-XXX

APPROVED VENDOR: E.S.I  
1200 JAY LANE  
GRAHAM, NC 27253

A	AMP	770006-S	14-16 GA TERMINAL, RECP.	1
VENDOR	PART #	DESCRIPTION	QTY	

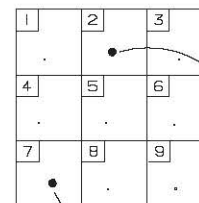
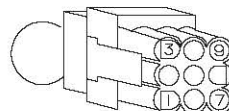
	52003329 B
HARNESS, STROBE LIGHT SWITCH	
Option: B37XX-XX-XXX	

CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLING	99916716001	SWITCH CONNECTOR	.
	PED	12015869	18-20 GA TERMINAL	.
	PED	12015870	14-16 GA TERMINAL	.
4	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	2
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	.
	AMP	770021-1	9 POSITION CONNECTOR, PLUG.	1
RELAY K1	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

5. STRIP INSULATION BACK 3/8" ON  
 UNTERMINATED LEADS.  
 4. REFER TO DWG. #52001136 FOR HARNESS  
 SPECIFICATIONS.  
 3. FULLY TAPE BREAKOUTS FOR 3"-  
 2" SPACING OTHERWISE.  
 2. TAG HARNESS FOR IDENTIFICATION.  
 1. CIRCUIT NUMBERS TO BE STAMPED AT  
 4" INTERVALS WITH THE PREFIX "B"  
 NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
JPI	18	BLACK	CIRCUIT JUMPER, 168A TO BK3.
.	.	.	.
.	.	.	.
.	.	.	.


○ BLUE  
 CONNECTOR #4  
 (STROBE LIGHT CONNECTOR)



JPI  
 JUMPER LENGTH  
 3" TYPICAL.

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	.
	VENDOR	PART #	DESCRIPTION	QTY

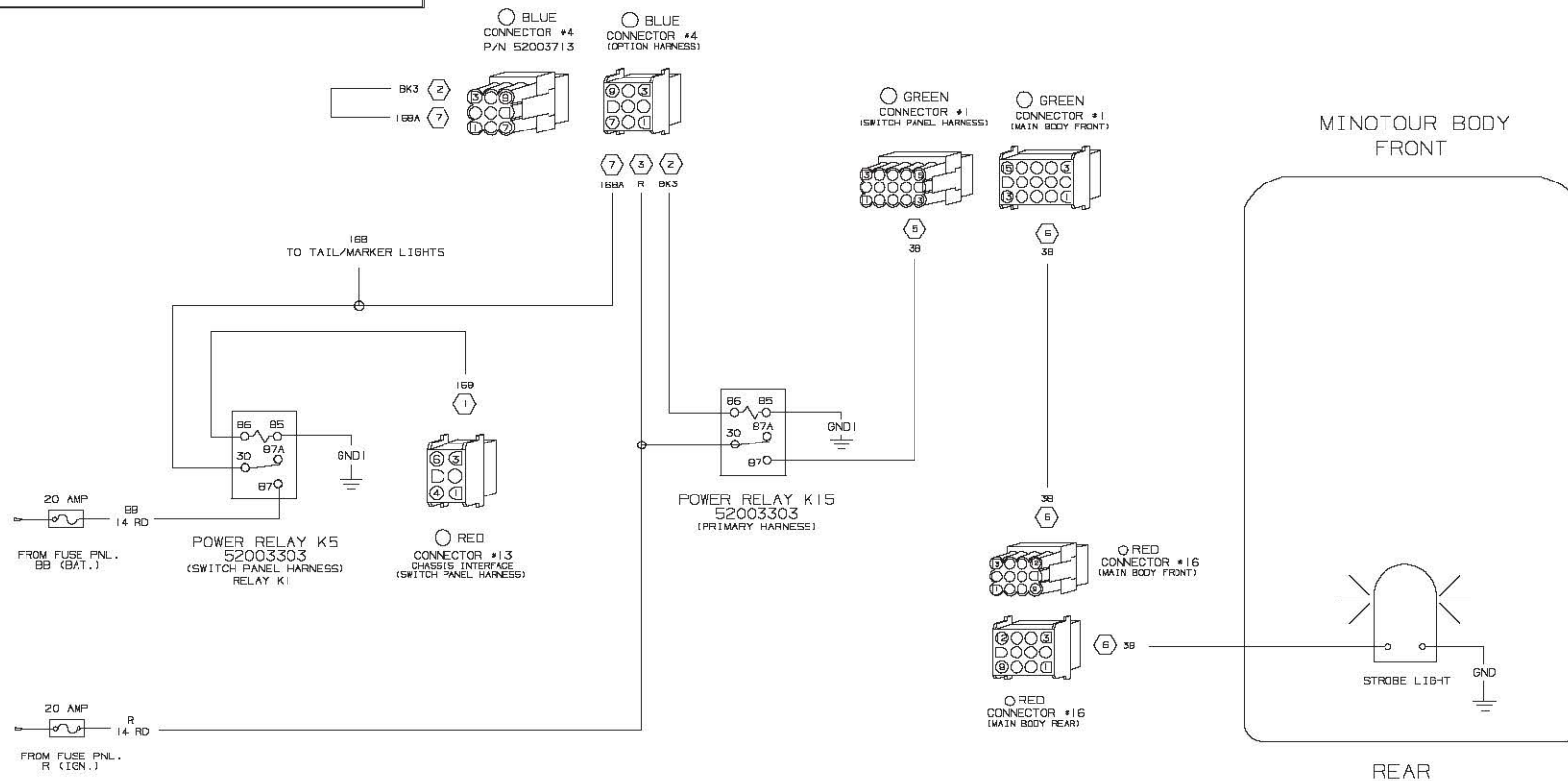
STROBE LIGHT WIRING  
 B3701-04-000 SRW, DRW

	52003713 A
HARNESS, STROBE LIGHT	
Option: B3701-04-000	



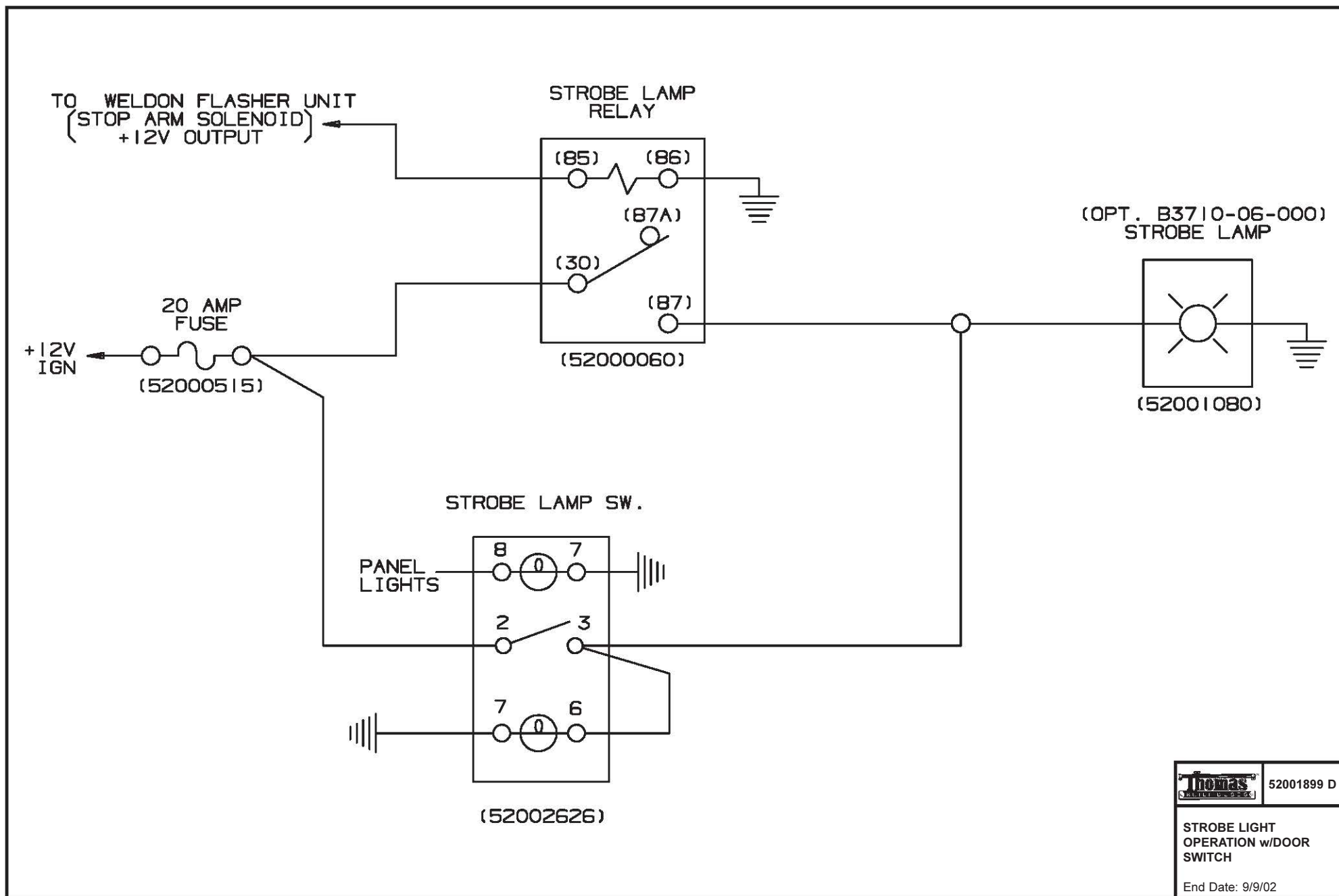
# SYSTEM OPERATION B3701-04-000


1. STROBE LIGHT TO OPERATE ANY TIME THE PARK LIGHTS ARE ACTIVATED.

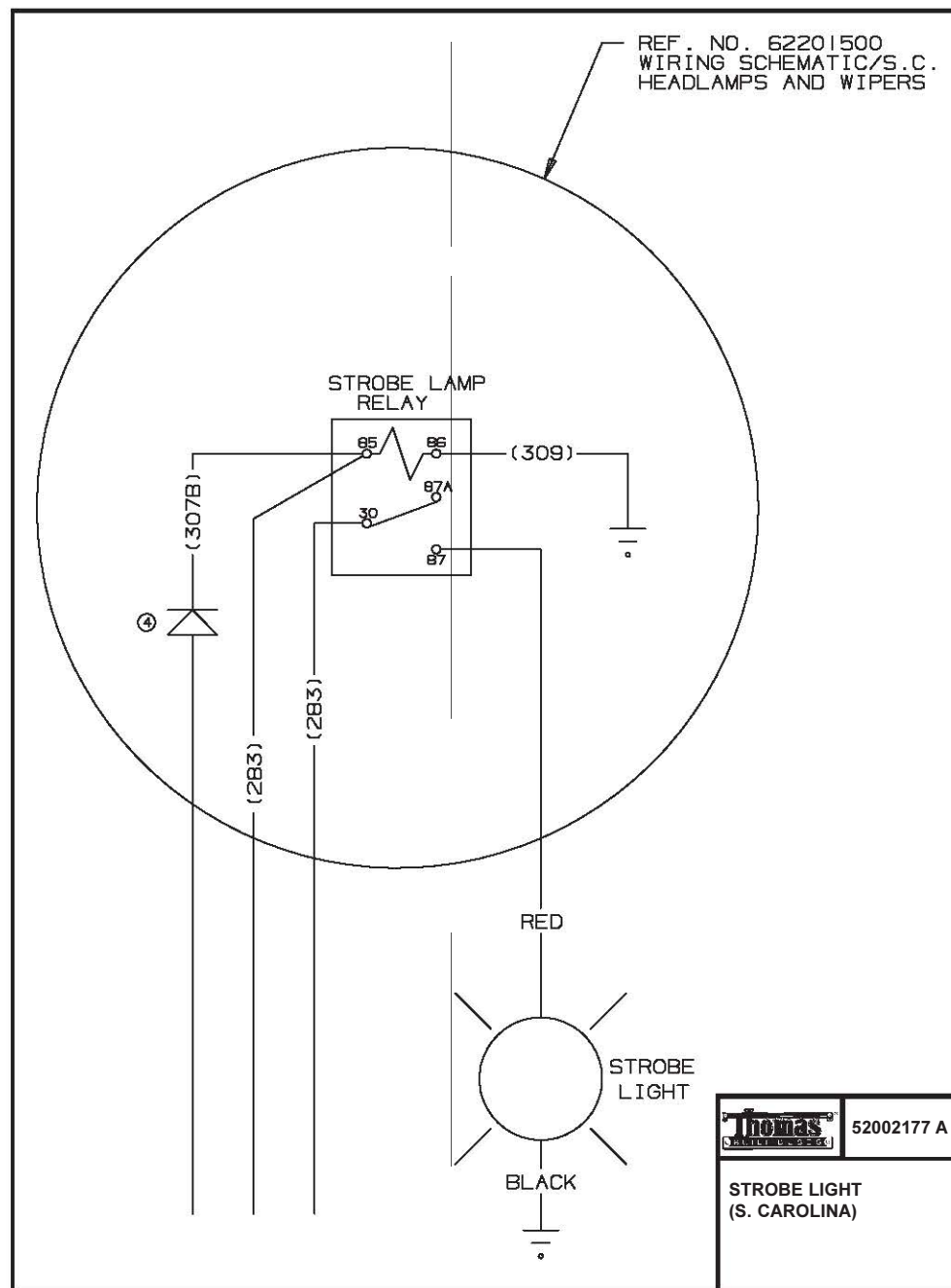
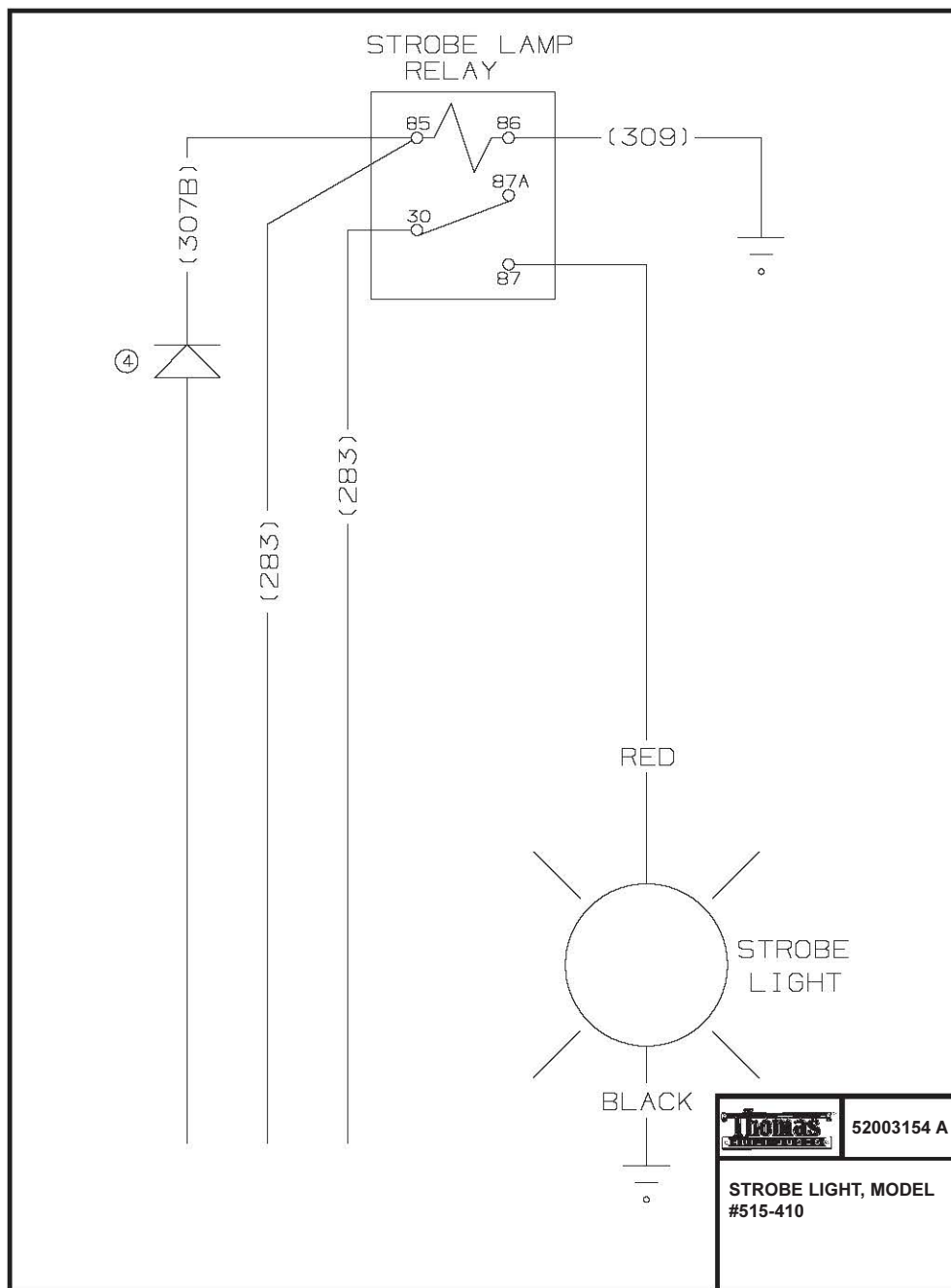


STROBE LIGHT ACTIVATION  
OPTION B3701-04-000  
MINOTOUR SRW, DRW

<b>Thomas</b> NATIONAL EQUIPMENT	52003718 B
<b>STROBE LIGHT</b>	
Option: B3701-04-000	

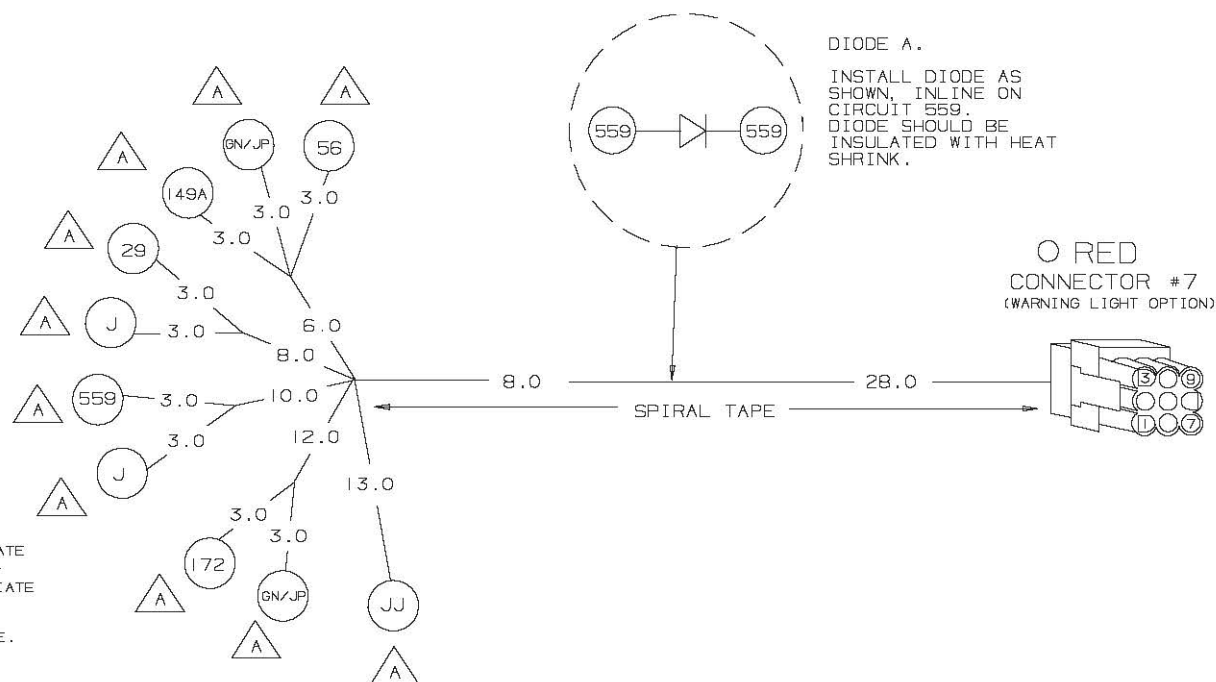


	52001899 D
STROBE LIGHT OPERATION w/DOOR SWITCH  End Date: 9/9/02	



CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLING	99916716001	SWITCH CONNECTOR	.
	PED	XX	18-20 GA TERMINAL	.
	PED	XX	14-16 GA TERMINAL	.
7	AMP	XX	14-20 GA. TERMINAL, SOCKET.	X
	AMP	XX	10-12 GA. TERMINAL, SOCKET.	X
	AMP	770021-1	9 POSITION CONNECTOR, PLUG.	1
DIODE A	XX	XX	1 AMP, 400 VOLT.	1
	.	.	.	.
	.	.	.	.

LEAD #	AWG	COLOR	DESCRIPTION
149A	18	BLACK	FLASHER POWER ON SIGNAL FEED.
GN/JP	18	GREEN	LIGHT GROUND.
559	18	WHITE	LIFT DOOR LATCH SIGNAL (GND.)
29	18	DARK BLUE	REAR DOOR LATCH SIGNAL (GND.)
JJ	18	RED	FROM FUSE PANEL (BAT.) ACCESSORY.
J	18	RED	FROM FUSE PANEL (IGN.) ACCESSORY.
172	18	RED	FROM BRAKE RELAY, PRIMARY HARNESS.
56	18	RED	RED WARNING LIGHT, FEED TO PILOT.
.	.	.	.



- WHERE "X" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEEDED FOR TERMINATION.
- WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
- USE WIRE TIES TO HOLD HARNESS WHERE NEEDED, MINIMUM AMOUNT AND SIZE.
- REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
- STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
- TAG HARNESS FOR IDENTIFICATION.
- CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.

#### NOTES:

D	XX	XX	BUTT SPLICE, 14-16 GA BLUE.	.
C	XX	XX	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	XX	XX	MALE RECEPT., 1/4", 14-16 GA.	.
A	XX	XX	FEMALE FAST-ON, 1/4", 14-16 GA.	X
VENDOR	PART #	DESCRIPTION	QTY	

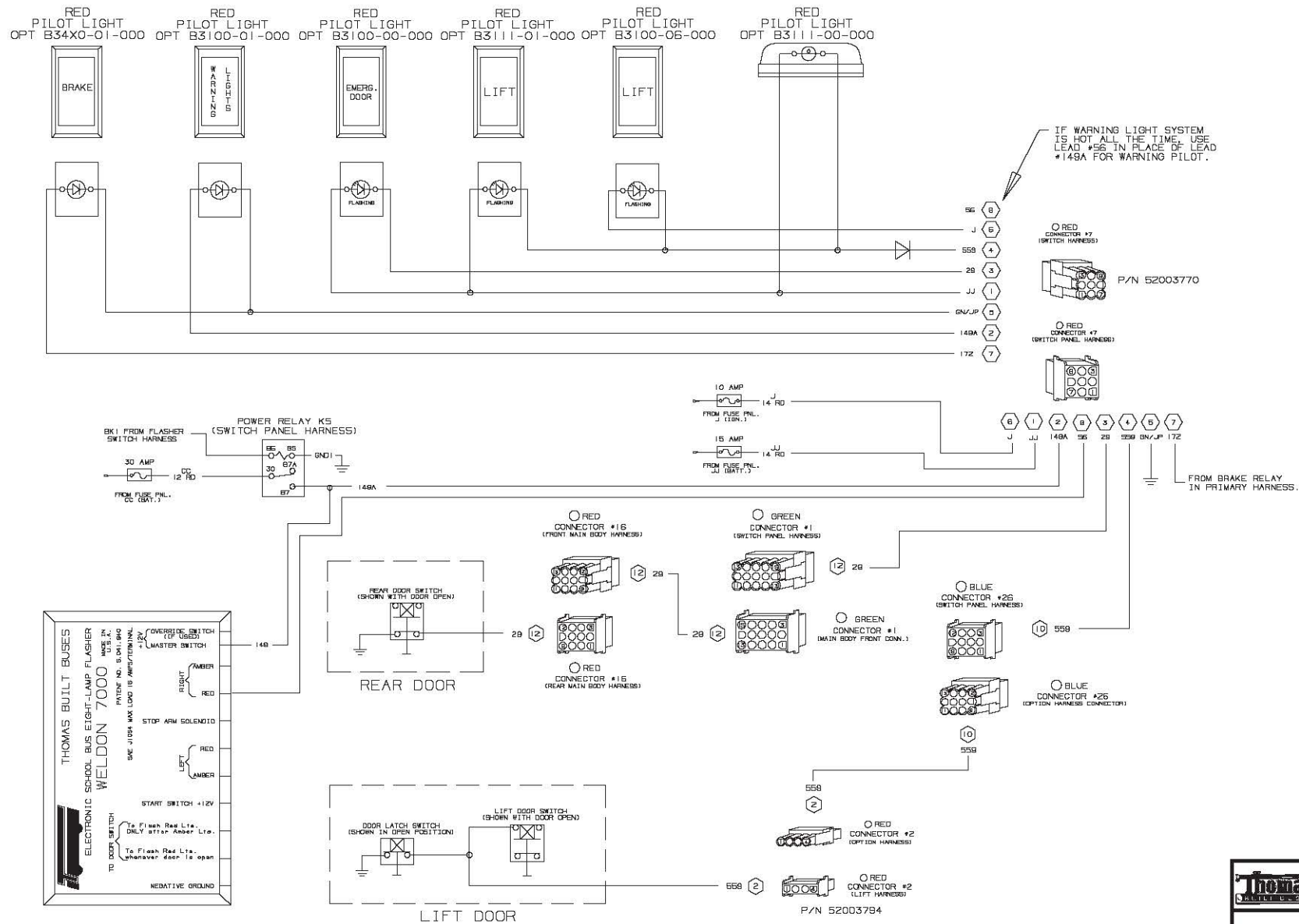
#### OPTIONAL WARNING LIGHTS B3XXX-XX-XXX

1	2	3
JJ	149A	29
4	5	6
559	GN/JP	J
7	8	9
172	56	.


<b>Thomas</b> SOLUTIONS	<b>52003770 B</b>
----------------------------	-------------------

#### WARNING PILOT LIGHTS

Option: 3XXX-XX-XXX



OPTIONAL WARNING LIGHTS, PILOT  
MINOTOUR SRW, DRW

	52003835 E
OPTIONAL WARNING LIGHTS	
End Date: 9/5/02	

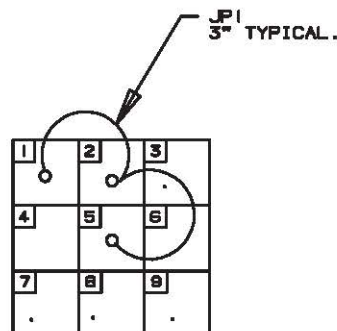
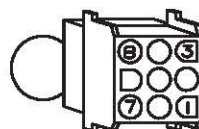


CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLING	99915718001	SWITCH CONNECTOR	.
	FED	12015859	18-20 GA TERMINAL	.
	FED	12015870	14-18 GA TERMINAL	.
12	AMP	770005-1	14-20 GA. TERMINAL, PIN.	3
	AMP	770003-3	10-12 GA. TERMINAL, PIN.	.
	AMP	770028-1	5 POSITION CONNECTOR, CAP.	1
RELAY K1	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-18 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

5. STRIP INSULATION BACK 3/8" ON  
UNTERMINATED LEADS.  
4. REFER TO DWG. #52001136 FOR HARNESS  
SPECIFICATIONS.  
3. FULLY TAPE BREAKOUTS FOR 3"-  
2" SPACING OTHERWISE.  
2. TAG HARNESS FOR IDENTIFICATION.  
1. CIRCUIT NUMBERS TO BE STAMPED AT  
4" INTERVALS WITH THE PREFIX "B"  
NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
JPI	16	BLACK	CONNECTOR JUMPER, 40, 17, & 188.
.	.	.	.
.	.	.	.
.	.	.	.

○ RED  
CONNECTOR #12  
(MARKER LIGHT CONNECTOR)



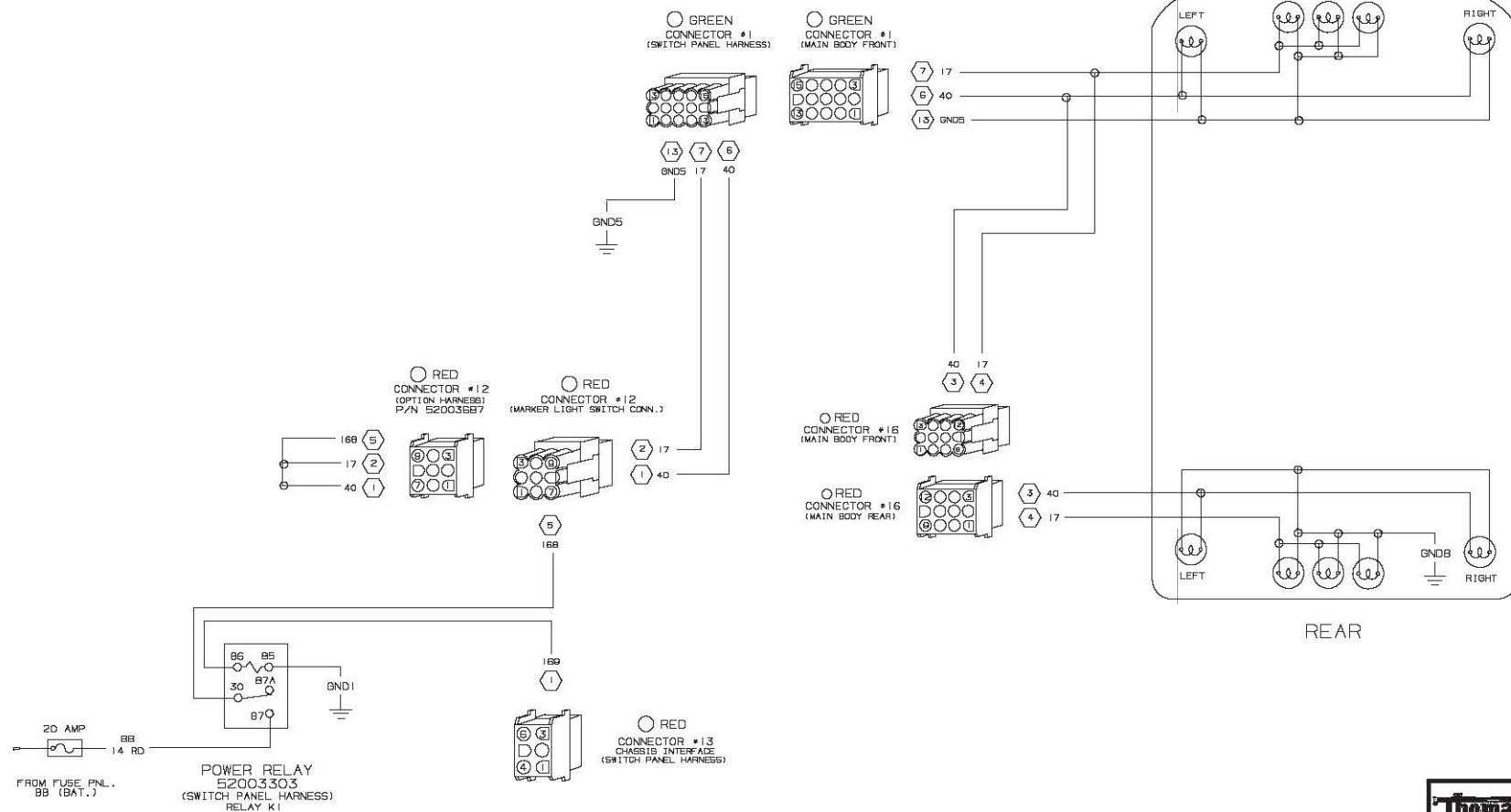
## MARKER/CLUSTER LIGHTS STANDARD ACTIVATION, SRW, DRW

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	.
	VENDOR	PART #	DESCRIPTION	QTY

<b>Thomas</b> SOLUTIONS	52003687 B
HARNESS, STANDARD MARKER LIGHT OPERATION	
End Date: 9/6/02	

## SYSTEM OPERATION STANDARD MARKER LIGHTING

1. ALL MARKER/CLEARANCE LIGHTS ACTIVATED WHEN VEHICLE PARK LIGHT CIRCUIT IS ENERGIZED.



STANDARD MARKER LIGHT OPERATION  
MINOTOUR SRW, DRW

**Thomas**  
52003701 C

CLUSTER SWITCH

Option: B3670-00-000

CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLING	99916716001	SWITCH CONNECTOR	1
	PED	12015869	18-20 GA TERMINAL	2
	PED	12015870	14-16 GA TERMINAL	2
12	AMP	770005-1	14-20 GA. TERMINAL, PIN.	5
	AMP	770005-3	10-12 GA. TERMINAL, PIN.	.
	AMP	770028-1	9 POSITION CONNECTOR, CAP.	1
RELAY KI	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

5. STRIP INSULATION BACK 3/8" ON  
 UNTERMINATED LEADS.  
 4. REFER TO DWG. #52001136 FOR HARNESS  
 SPECIFICATIONS.  
 3. FULLY TAPE BREAKOUTS FOR 3"-  
 2" SPACING OTHERWISE.  
 2. TAB HARNESS FOR IDENTIFICATION.  
 1. CIRCUIT NUMBERS TO BE STAMPED AT  
 4" INTERVALS WITH THE PREFIX "B"  
 NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
40	18	BROWN/WHITE	MARKER LIGHTS FEED (FRONT)
BB	14	RED	TO FUSE PANEL (BAT.)
17	18	BROWN	MARKER LIGHTS FEED (REAR)
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+)
GN/JP	18	GREEN	SWITCH PANEL LIGHTS (-)
.	.	.	.

DOME LST. SWITCH  
 CONNECTOR #1  
 (REAR VIEW)

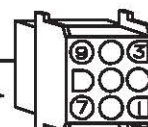
6	7
70	GN/JP
1	4
.	.
2	8
BB	.
3	9
40	17

1.0

48.0

← SPIRAL TAPE →

O RED  
 CONNECTOR #12  
 (MARKER LIGHT CONNECTOR)



1	2	3
40	17	BB
4	5	6
.	.	.
7	8	9
70	GN/JP	.

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	.
	VENDOR	PART #	DESCRIPTION	QTY

MARKER/CLUSTER LIGHTS  
 OPTION B3670-01-000 SRW, DRW

	52003689 A
HARNESS, MARKER/ CLEARANCE ACT.	
Option: B3670-01-000	



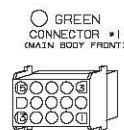
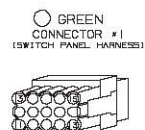
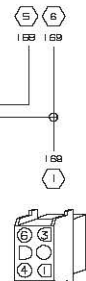
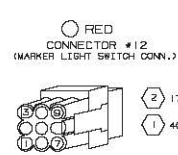
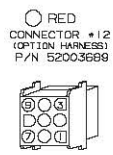
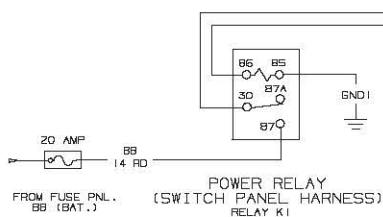
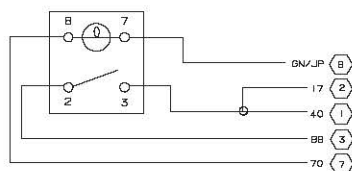
## SYSTEM OPERATION

B3670-01-000

1. ONE SWITCH LOCATED ON SWITCH PANEL TO OPERATE THE CLUSTER AND MARKER LIGHTING INDEPENDANTLY OF THE HEADLIGHT SWITCH.

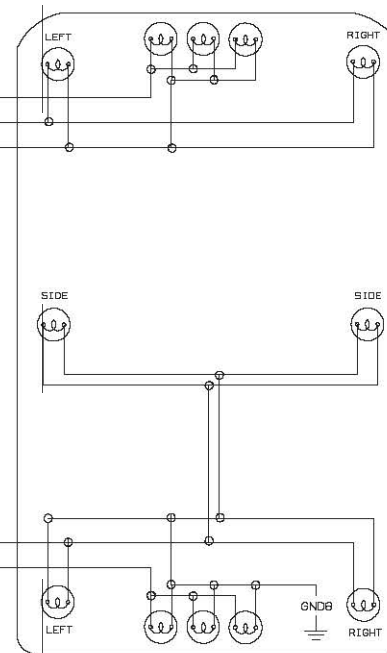
### MARKER LIGHT SWITCH (REAR VIEW)

6	7
70	GN/JP
1	4
2	5
BB	6
3	17
40	7



## MARKER/CLEARANCE LIGHTING

### FRONT



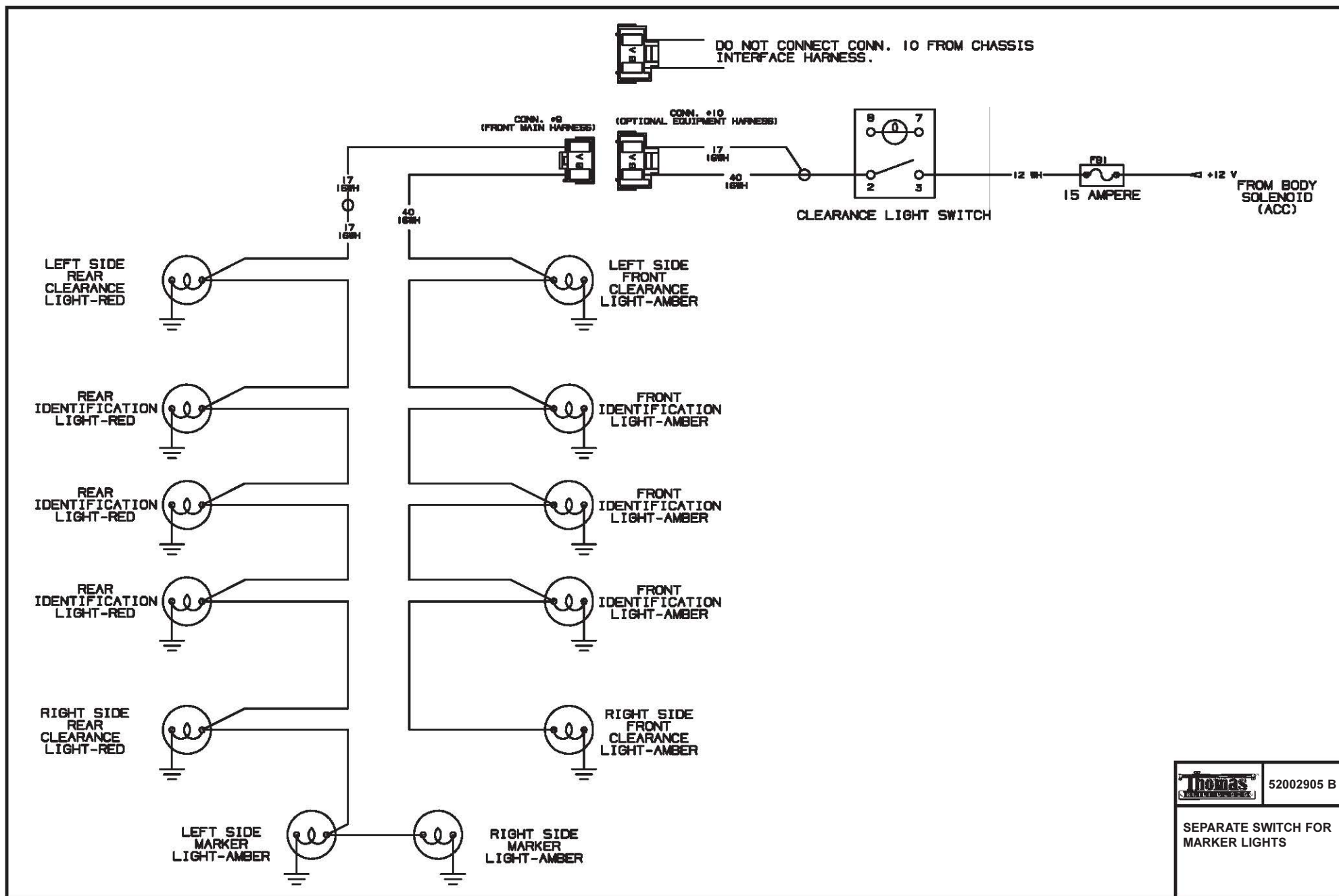
### REAR

MARKER/CLUSTER LIGHT WIRING  
OPTION B3670-01-000  
MINOTOUR SRW, DRW

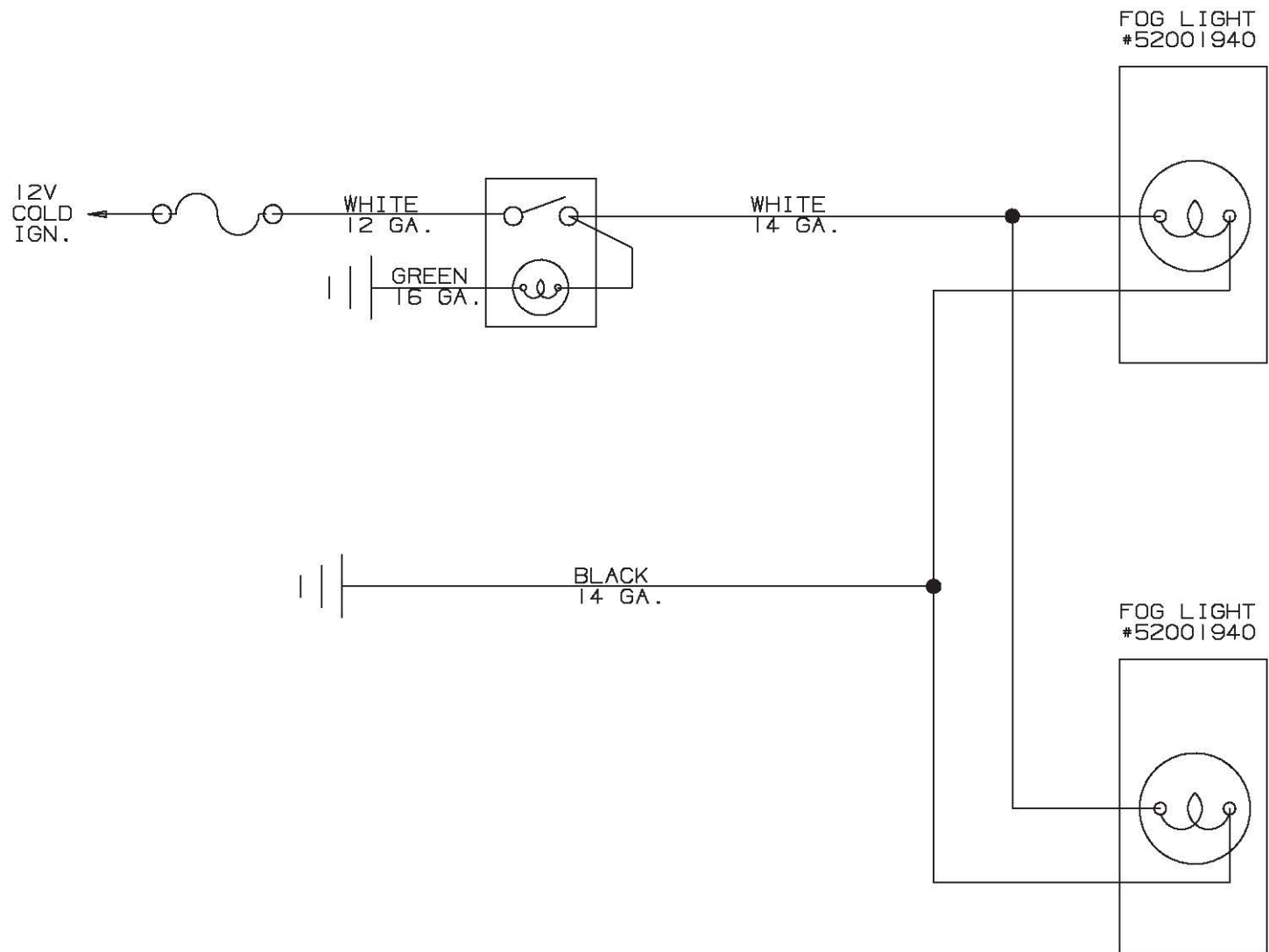



MARKER/CLEARANCE LIGHTS

Option: B3670-01-000





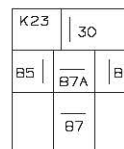


	52001947 A
FOG LIGHT Option: B3680-04-000	

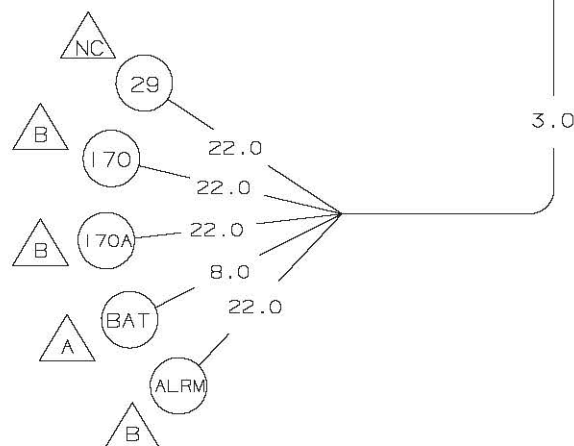
CONN	VENDOR	PART #	DESCRIPTION
RELAY BLOCK 23	HELLA	87122	HOUSING-RELAY, 5 POSITION.
	XX	XX	TERMINAL-FEMALE, 1/4", 14-16 GA.
	XX	XX	TERMINAL-FEMALE, 1/4", 10-12 GA.

CIR	GA	COLOR	DESCRIPTION
BAT	14	RED	RELAY FEED, REVERSE LIGHTS.
29	16	DARK BLUE	RELAY TRIGGER, REAR DOOR GROUND SIGNAL.
170	14	BLUE/WHITE	FEED TO REVERSE LIGHTS, REAR MAIN HARNESS.
170A	14	BLUE/YELLOW	REVERSE LIGHT SIGNAL FROM CHASSIS.
ALRM	16	BLUE/YELLOW	BACK-UP ALARM POSITIVE FEED.

30 - 170  
85 - 29  
86 - BAT  
87 - BAT  
87A - 170A, ALRM



BOTTOM VIEW OF  
RELAY BLOCK  
IS SHOWN.



#### NOTES:

1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.
2. TAG HARNESS FOR IDENTIFICATION.
3. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
5. USE WIRE TIES TO HOLD HARNESS WHERE NEEDED, MINIMUM NUMBER AND SIZE.
6. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.

B	XX	XX	14-16 GA. BUTT SPLICE, INSULATED
A	AMP	XX	14-16, 1/4" FEMALE FAST ON, ULTRA-PQD
CONN	VENDOR	PART #	DESCRIPTION

<b>Thomas</b> SOLUTIONS	52004747 A
<b>HARNESS, REVERSE LIGHT</b>	
Option: B3281-00-000	

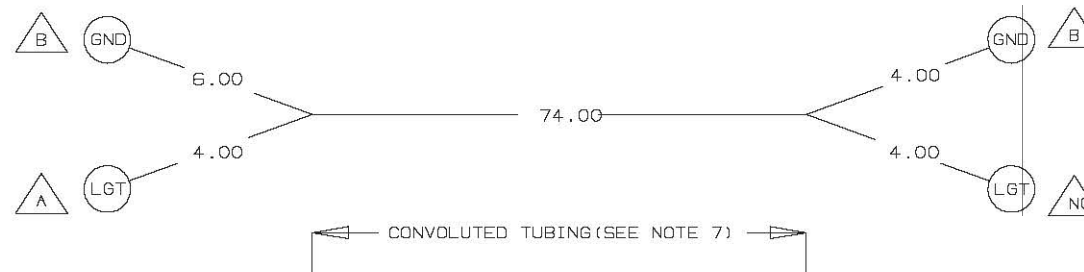
REVERSE LIGHTS TO OPERATE WHENEVER REAR EMERGENCY DOOR IS OPENED, REGARDLESS OF KEY POSITION.

\_\_\_\_\_





LEAD #	AWG	COLOR	DESCRIPTION
GND	16	WHITE	ENGINE LIGHT GROUND
LGT	16	BLACK	ENGINE LIGHT FEED



8. USE BLACK SLIT POLYIMIDE OR NYLON HEAT RESISTANT CONDUIT OF MINIMUM SIZE WITH A MINIMUM OF 120 DEGREES CENTIGRADE CONTINUOUS OPERATING TEMPERATURE WHERE INDICATED. SECURELY TAPE CONDUIT TO HARNESS ON ENDS.

7. SPOT TAPE HARNESS WHERE NECESSARY.

6. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.

5. WHERE "X" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEEDED FOR TERMINATION.

4. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.

3. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.

2. TAG HARNESS FOR IDENTIFICATION.

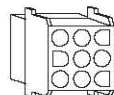
1. CIRCUIT NUMBERS TO BE STAMPED AT 2" INTERVALS.

NOTES:

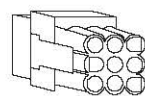
B	XX	XX	*10 RING TERMINAL, 14-16 GA, INSULATED	X
A	XX	XX	BUTT SPLICE, 14-16 GA, INSULATED	X
CONN	VENDOR	PART #	DESCRIPTION	QTY

	<b>52005044 A</b>
<b>HARNESS, ENGINE COMPARTMENT LIGHT</b>	
Effective Date: 5/3/01	





○ BLUE  
CONNECTOR #36  
(HATCH FAN, I.D. SIGN,  
ENG. COMP., LIGHT)



○ BLUE  
CONNECTOR #36  
(HATCH FAN, I.D. SIGN,  
ENG. COMP. LIGHT)



52005048 A

### ENGINE COMPARTMENT LIGHT

Effective Date: 5/3/01

**FOUR LIGHT  
WARNING SYSTEM  
SECTION**

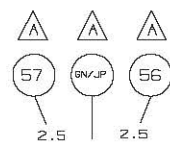
CONN	VENDOR	PART #	DESCRIPTION	QTY
1, 2	CARLING	98916716001	SWITCH CONNECTOR	2
	PED	12015868	18-20 GA TERMINAL	5
	PED	12015870	14-16 GA TERMINAL	4
3	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	7
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	.
	AMP	770023-1	16 POSITION CONNECTOR, PLUG.	1
RELAY K1	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

5. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.  
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.  
3. FULLY TAPE BREAKOUTS FOR 3"-2" SPACING OTHERWISE.  
2. TAG HARNESS FOR IDENTIFICATION.  
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"  
NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
K	16	RED	12V+ IGN. FROM FUSE PANEL.
56	18	RED	WARNING LIGHT TO FLASHER, RED.
57	18	RED	WARNING LIGHT TO FLASHER, RED.
59	16	RED/BLACK	DOOR SIGNAL (GND) TO FLASHER.
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+)
GND	18	WHITE	CHASSIS GROUND.
GN/JP	18	GREEN	GROUND, SWITCH LIGHT JUMPER (-).
BK1	16	BLACK	FROM SWITCH TO WELDON RELAY (+).
.	.	.	.
.	.	.	.

MOMENTARY ACTIVATION  
CONNECTOR #2  
(REAR VIEW)

8	7
70	GN/JP
1	4
.	.
2	5
GND	GN/JP
3	6
59	.

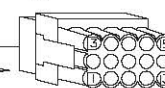


MASTER ACTIVATION  
CONNECTOR #1  
(REAR VIEW)

8	7
70	GN/JP
1	4
.	.
2	5
K	.
3	6
BK1	BK1

1	2	3
.	56	57
4	5	6
.	70	.
7	8	9
.	K	.
10	11	12
GND	59	.
13	14	15
.	BK1	.

○ GREEN



CONNECTOR #3

OPTION: B3540-01-000  
(SRW, DRW MODELS ONLY)

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	3
VENDOR	PART #	DESCRIPTION	QTY	

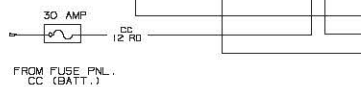
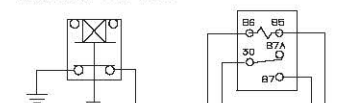
<b>Thomas</b> SOLUTIONS	<b>52003582 B</b>
<b>HARNESS, FOUR LIGHT WARNING SYSTEM</b>	
Option: B3540-01-000 End Date: 9/5/02	



# B3540-01-000 SYSTEM OPERATION

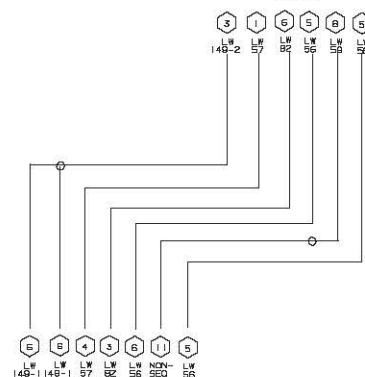
1. INCLUDES MASTER SWITCH, PILOT LIGHT, AND MANUAL SPRING RETURN SWITCH MOUNTED ON SWITCH PANEL.
2. INCLUDES DOOR CONTROL SWITCH.
3. CONNECTICUT SPECIFICATION.

DOOR SWITCH (SHOWN WITH DOOR OPEN) POWER RELAY (SWITCH PANEL HARNESS)



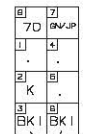
FROM FUSE PNL. CC (BATT.)

P/N 52005624

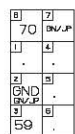


WELDON FLASHER

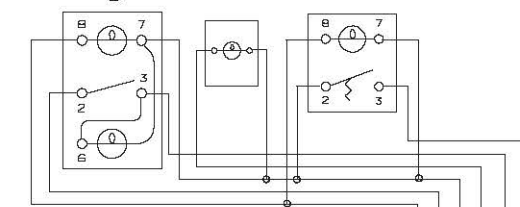
MASTER/ACTIVATION SWITCH CONNECTOR #1 (REAR VIEW)



MOMENTARY ACTIVATION SWITCH CONNECTOR #2 (REAR VIEW)

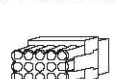


PILOT LIGHT

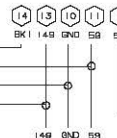


GREEN CONNECTOR #3 (SWITCH PANEL HARNESS)

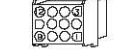
P/N 52003582



GREEN CONNECTOR #3 (SWITCH HARNESS)



GREEN CONNECTOR #6 (FLASHER HARNESS)



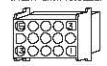
GREEN CONNECTOR #6 (SWITCH PANEL HARNESS)



NOTE: ONLY RELEVANT WIRES ARE SHOWN FOR CLARITY

GREEN CONNECTOR #1 (SWITCH PANEL HARNESS)

GREEN CONNECTOR #1 (FRONT MAIN HARNESS)



FRONT

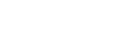


REAR



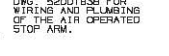
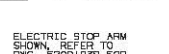
GREEN CONNECTOR #17 (FRONT MAIN HARNESS)

GREEN CONNECTOR #17 (FRONT MAIN HARNESS)



TO E.S.I. LIGHT MODULE

20 AMP FROM FUSE PNL. SS (BATT.)



OPTION B3540-01-000  
MINOTOUR SRW, DRW

	52003625 D
FOUR LIGHT WARNING SYSTEM	
Option: B3540-01-000 End Date: 9/5/02	



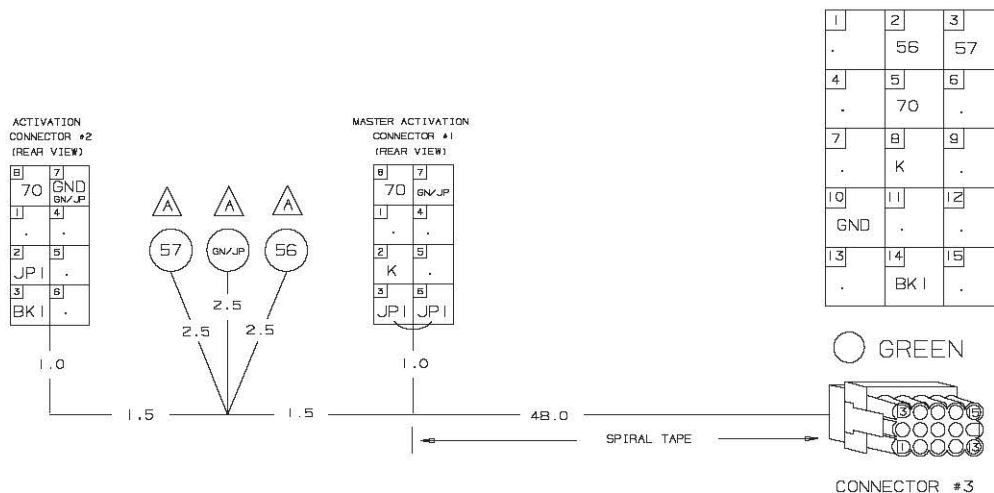




CONN	VENDOR	PART #	DESCRIPTION	QTY
1, 2	CARLING	99916716001	SWITCH CONNECTOR	2
	PED	12015869	18-20 GA TERMINAL	5
	PED	12015970	14-16 GA TERMINAL	4
3	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	6
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	-
	AMP	770023-1	15 POSITION CONNECTOR, PLUG.	1
RELAY K1	HELLA	87122	HOUSING-RELAY, 5 POSITION.	-
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	-
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	-

5. STRIP INSULATION BACK 3/8" ON  
UNTERMINATED LEADS.  
4. REFER TO DWG. #52001136 FOR HARNESS  
SPECIFICATIONS.  
3. FULLY TAPE BREAKOUTS FOR 3"-  
2" SPACING OTHERWISE.  
2. TAG HARNESS FOR IDENTIFICATION.  
1. CIRCUIT NUMBERS TO BE STAMPED AT  
4" INTERVALS WITH THE PREFIX "B"  
NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
K	16	RED	12V+ IGN. FROM FUSE PANEL.
BK1	18	BLACK	FROM SWITCH TO WELDON RELAY (+).
56	18	RED	WARNING LIGHT TO FLASHER, RED.
57	18	RED	WARNING LIGHT TO FLASHER, RED.
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+).
GND	18	WHITE	CHASSIS GROUND.
GNZJP	18	GREEN	GROUND, SWITCH LIGHT JUMPER (-).
JPI	16	BLACK	SWITCH JUMPER, TO RELAY.
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OPTION: B3540-05-000  
(SRW, DRW MODELS ONLY)

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	3
	VENDOR	PART #	DESCRIPTION	QTY

52003621 A

**HARNESS, FOUR LIGHT  
WARNING SYSTEM**  
Option: B3540-05-000



# B3540-05-000 SYSTEM OPERATION

1. INCLUDES SWITCH AND PILOT LIGHT, WITH MASTER SWITCH MOUNTED ON SWITCH PANEL.
2. INCLUDES DOOR CONTROL SWITCH.
3. MARYLAND SPECIFICATION.

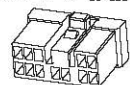
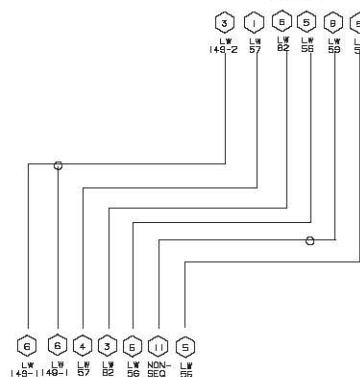
DOOR SWITCH (SHOWN WITH DOOR OPEN) POWER RELAY (SWITCH PANEL HARNESS)



30 AMP  
12VDC  
FROM FUSE PNL.  
CC (BATT.)



P/N 52005624

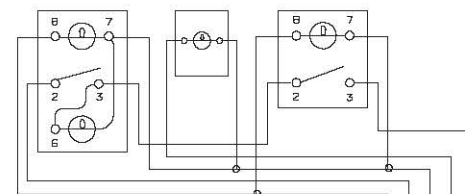


WELDON FLASHER

MASTER/ACTIVATION  
SWITCH  
CONNECTOR #1  
(REAR VIEW)



PILOT LIGHT



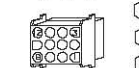
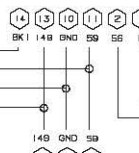
ACTIVATION  
SWITCH  
CONNECTOR #2  
(REAR VIEW)



GREEN  
CONNECTOR #3  
(SWITCH PANEL HARNESS)

P/N 52003621

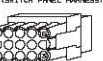
GREEN  
CONNECTOR #3  
(SWITCH HARNESS)



GREEN  
CONNECTOR #6  
(SWITCH PANEL HARNESS)

GREEN  
CONNECTOR #6  
(SWITCH PANEL HARNESS)

GREEN  
CONNECTOR #1  
(SWITCH PANEL HARNESS)



GREEN  
CONNECTOR #1  
(FRONT MAIN HARNESS)

GREEN  
CONNECTOR #1  
(FRONT MAIN HARNESS)

OPTION B3540-05-000  
MINOTOUR SRW, DRW

FRONT

LEFT  
RED



RIGHT  
RED



GREEN  
CONNECTOR #17  
(REAR MAIN HARNESS)

GREEN  
CONNECTOR #17  
(FRONT MAIN HARNESS)

GREEN  
CONNECTOR #17  
(FRONT MAIN HARNESS)

GREEN  
CONNECTOR #17  
(FRONT MAIN HARNESS)

GREEN  
CONNECTOR #17  
(FRONT MAIN HARNESS)

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CONNECTOR #17  
(FRONT MAIN HARNESS)

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CONNECTOR #17  
(FRONT MAIN HARNESS)

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(FRONT MAIN HARNESS)

GREEN  
CONNECTOR #17  
(FRONT MAIN HARNESS)

GREEN  
CONNECTOR #17  
(FRONT MAIN HARNESS)

GREEN  
CONNECTOR #17  
(FRONT MAIN HARNESS)

GREEN  
CONNECTOR #17  
(FRONT MAIN HARNESS)

TO E.S.I. LIGHT MODULE

20 AMP  
FROM FUSE PNL.  
SS (BATT.)

20 AMP  
FROM FUSE PNL.  
SS (BATT.)

20 AMP  
FROM FUSE PNL.  
SS (BATT.)

20 AMP  
FROM FUSE PNL.  
SS (BATT.)

20 AMP  
FROM FUSE PNL.  
SS (BATT.)

20 AMP  
FROM FUSE PNL.  
SS (BATT.)

20 AMP  
FROM FUSE PNL.  
SS (BATT.)

20 AMP  
FROM FUSE PNL.  
SS (BATT.)

20 AMP  
FROM FUSE PNL.  
SS (BATT.)

20 AMP  
FROM FUSE PNL.  
SS (BATT.)

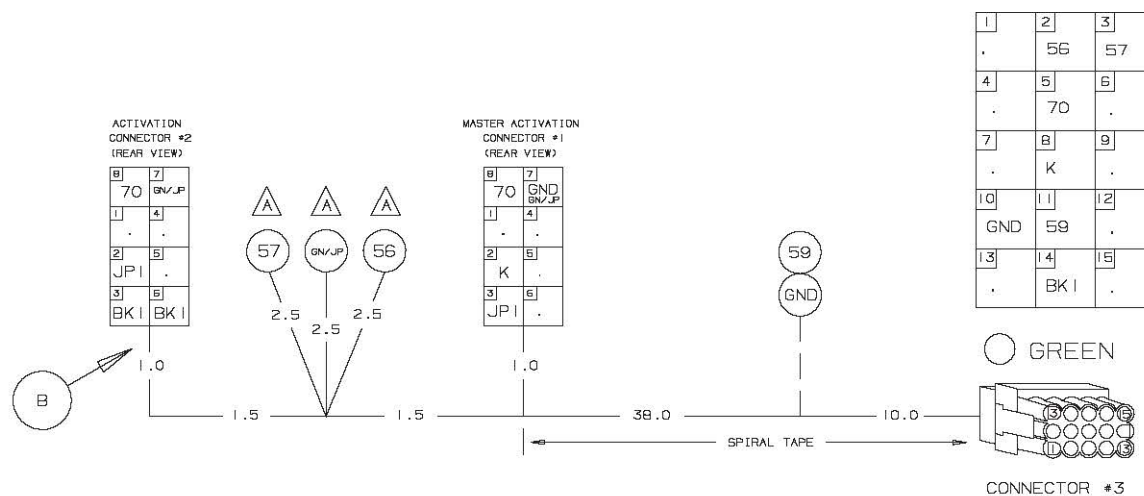
	52003628 D
FOUR LIGHT WARNING SYSTEM	
Option: B3540-05-000	
End Date: 9/5/02	

CONN	VENDOR	PART #	DESCRIPTION	QTY
1, 2	CARLING	99916716001	SWITCH CONNECTOR	2
	PED	12015869	18-20 GA TERMINAL	6
	PED	12015870	14-16 GA TERMINAL	2
3	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	7
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	.
	AMP	770023-1	15 POSITION CONNECTOR, PLUG.	1
RELAY K1	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

5. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.  
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.  
3. FULLY TAPE BREAKOUTS FOR 3"-2" SPACING OTHERWISE.  
2. TAG HARNESS FOR IDENTIFICATION.  
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"

NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
K	16	RED	12V+ IGN. FROM FUSE PANEL.
BK1	16	BLACK	FROM SWITCH TO WELDON RELAY (+).
GND	18	WHITE	CHASSIS GROUND.
GN/JP	18	GREEN	GROUND, SWITCH LIGHT JUMPER (-).
JPI	16	BLACK	JUMPER, MASTER TO ACTIVATION SW.
56	18	RED	WARNING LIGHT TO FLASHER, RED.
57	18	RED	WARNING LIGHT TO FLASHER, RED.
59	18	RED/BLACK	DOOR SIGNAL (GND) TO FLASHER.
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+)
.	.	.	.
.	.	.	.
.	.	.	.



OPTION: B3540-06-000  
(SRW, DRW MODELS ONLY)

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	3
VENDOR	PART #	DESCRIPTION	QTY	

<b>Thomas</b> SOLUTIONS	<b>52003622 C</b>
<b>HARNESS, FOUR LIGHT WARNING SYSTEM</b>	
Option: B3540-06-000 End Date: 9/6/02	



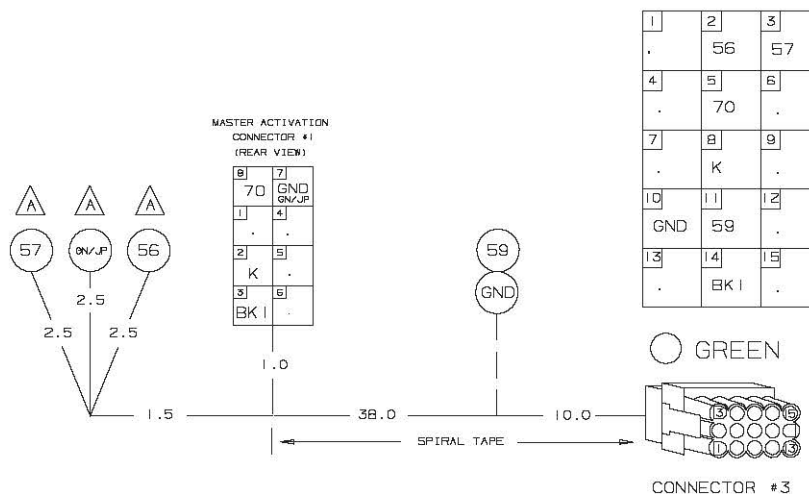


CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLING	99916716001	SWITCH CONNECTOR	1
	PED	12015869	18-20 GA TERMINAL	5
	PED	12015870	14-16 GA TERMINAL	2
3	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	7
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	.
	AMP	770023-1	15 POSITION CONNECTOR, PLUG.	1
RELAY K1	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

5. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.  
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.  
3. FULLY TAPE BREAKOUTS FOR 3"-2" SPACING OTHERWISE.  
2. TAG HARNESS FOR IDENTIFICATION.  
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"

NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
K	16	RED	12V+ IGN. FROM FUSE PANEL.
BK1	16	BLACK	FROM SWITCH TO WELDON RELAY (+).
56	18	RED	WARNING LIGHT TO FLASHER, RED.
57	18	RED	WARNING LIGHT TO FLASHER, RED.
59	18	RED/BLACK	DOOR SIGNAL (GND) TO FLASHER.
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+)
GN/JP	18	GREEN	GROUND, SWITCH LIGHT JUMPER (-).
GND	18	WHITE	CHASSIS GROUND.
.	.	.	.



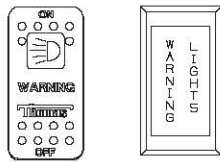
OPTION: B3540-09-000  
(SRW, DRW MODELS ONLY)

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	3
	VENDOR	PART #	DESCRIPTION	QTY

52003821 B

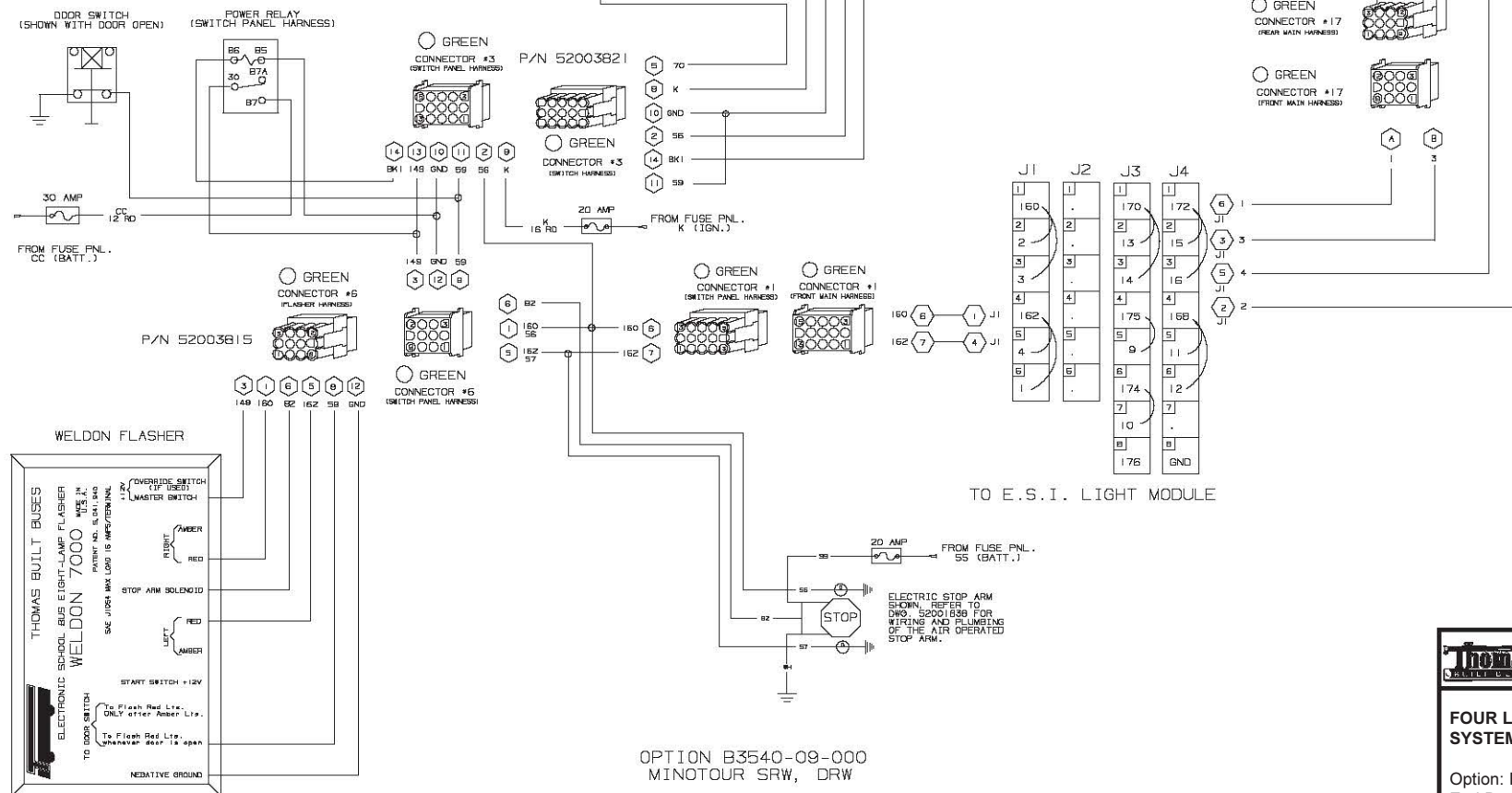
**HARNESS, FOUR LIGHT WARNING SYSTEM**

Option: B3540-09-000  
End Date: 9/5/02



### B3540-09-000 SYSTEM OPERATION

1. INCLUDES SWITCH AND PILOT LIGHT MOUNTED ON SWITCH PANEL.
2. NO MASTER SWITCH.
3. MICHIGAN SPECIFICATION.



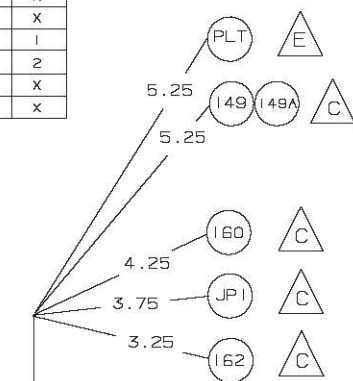
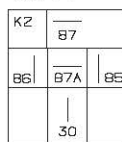
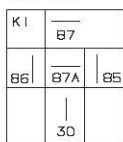
CONN	VENDOR	PART #	DESCRIPTION	QTY
3	AMP	XX	14-16 GA. TERMINAL, RECEPTICAL.	X
	AMP	XX	10-12 GA. TERMINAL, RECEPTICAL.	X
	AMP	770022-1	12 POSITION CONNECTOR, PLUG.	1
RELAY K1, K2	HELLA	87122	HOUSING-RELAY, 5 POSITION.	2
	XX	XX	TERMINAL-FEMALE, 1/4", 14-16 GA.	X
	XX	XX	TERMINAL-FEMALE, 1/4", 10-12 GA.	X

NOTE:

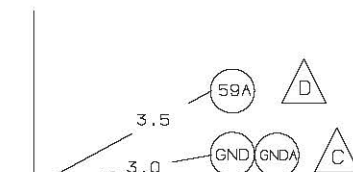
BOTTOM VIEW OF RELAY BLOCKS HAS BEEN SHOWN. ORIENT BLOCKS SUCH THAT MOUNTING TABS ARE UPRIGHT AND TOWARD FRONT ON FINISHED HARNESS.

30 - JPI  
95 - 59  
86 - JPI  
87 - 82  
87A - .

30 - 59A  
95 - GND  
86 - 149A  
87 - GND  
87A - .



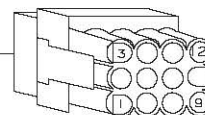
2.25



3.0

1	2	3
160	.	149
4	5	6
.	162	82
7	8	9
.	59	.
10	11	12
.	PLT	GND

GREEN CONNECTOR #6  
(TO SWITCH CABINET HARNESS)



LEAD #	AWG	COLOR	DESCRIPTION
59	16	RED/BLACK	DOOR SIGNAL (GND) TO FLASHER.
59A	16	RED/BLACK	DOOR SIGNAL, RELAY K2 TO FLASHER
82	12	BLUE	FEED TO STOP ARM SOLENOID.
149	12	BLACK	FLASHER POWER.
149A	18	BLACK	FLASHER MAIN TO RELAY K2
160	12	BLACK	WARNING LIGHT MONITOR FEED. (RED)
162	12	ORANGE	WARNING LIGHT MONITOR FEED. (RED)
GND	12	WHITE	FLASHER GROUND.
GND	18	WHITE	RELAY GROUND
PLT	16	RED	PILOT LIGHT FEED FROM CUR. SENSOR
JPI	14	BLUE	STOP ARM FEED TO RELAY K1

1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.
2. TAG HARNESS FOR IDENTIFICATION.
3. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
5. SPOT TAPE HARNESS WHERE NECESSARY. USE A MINIMAL AMOUNT.
6. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
7. WHERE "X" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEEDED FOR TERMINATION.

NOTES:

E	XX	XX	MALE BLADE, 3/16" 14-16 GA.	X
D	XX	XX	FEMALE FAST ON, 1/4" 16-18 GA.	X
C	XX	XX	FEMALE FAST ON, 1/4" 10-12 GA.	X
B	XX	XX	RING TERMINAL, 3/8" STUD, 10-12 GA.	X
A	XX	XX	BUTT-SPLICE, 14-16 GA., INSULATED.	X
	VENDOR	PART #	DESCRIPTION	QTY

OPTION B3540-10-000  
SRW, DRW MODELS

	52004646 B
<b>HARNESS, FOUR LIGHT WARNING SYSTEM</b>	
Option: B3540-10-000 End Date: 9/19/02	

CONN	VENDOR	PART #	DESCRIPTION	QTY
6	AMP	XX	14-16 GA. TERMINAL, RECEPTICAL.	X
	AMP	XX	10-12 GA. TERMINAL, RECEPTICAL.	X
	AMP	770022-1	12 POSITION CONNECTOR, PLUG.	1
RELAY K1, K2	HELLA	87122	HOUSING-RELAY, 5 POSITION.	2
	XX	XX	TERMINAL-FEMALE, 1/4", 14-16 GA.	X
	XX	XX	TERMINAL-FEMALE, 1/4", 10-12 GA.	X
6A	AMP	XX	14-16 GA. TERMINAL, RECEPTICAL.	X
	AMP	XX	10-12 GA. TERMINAL, RECEPTICAL.	X
	AMP	173851-1	12 POSITION CONNECTOR, PLUG.	1

1	2	3
.	162	JP1
4	5	6
160	.	149
7	8	9
149	.	.
10	11	12
.	59A	GND

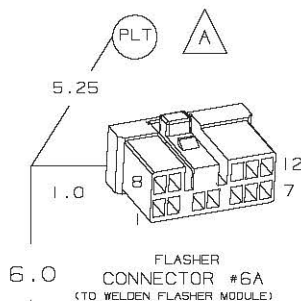
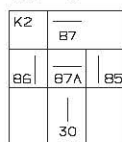
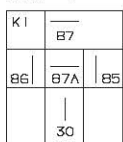
LEAD #	AWG	COLOR	DESCRIPTION
59	16	RED/BLACK	DOOR SIGNAL (GND) TO FLASHER.
59A	16	RED/BLACK	DOOR SIGNAL, RELAY K2 TO FLASHER
82	16	BLUE	FEED TO STOP ARM SOLENOID.
149	16	BLACK	FLASHER POWER.
149A	16	BLACK	FLASHER MAIN TO RELAY K2
160	16	BLACK	WARNING LIGHT MONITOR FEED. (RED)
162	16	ORANGE	WARNING LIGHT MONITOR FEED. (RED)
GND	16	WHITE	FLASHER GROUND.
GND A	16	WHITE	RELAY GROUND
PLT	16	RED	PILOT LIGHT FEED FROM CUR. SENSOR
JP1	16	BLUE	STOP ARM FEED TO RELAY K1

NOTE:

BOTTOM VIEW OF RELAY BLOCKS HAS BEEN SHOWN. ORIENT BLOCKS SUCH THAT MOUNTING TABS ARE UPRIGHT AND TOWARD FRONT ON FINISHED HARNESS.

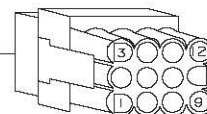
30 - JP1  
85 - 59  
86 - JP1  
87 - 82  
87A - .

30 - 59A  
85 - GND A  
86 - 149A, 149  
87 - GND A  
87A - .



1	2	3	149
160	.	149A	
4	5	6	
.	162	82	
7	8	9	
.	59	.	
10	11	12	GND
.	PLT	GND A	

GREEN  
CONNECTOR #6  
(TO SWITCH CABINET HARNESS)



1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.
2. TAG HARNESS FOR IDENTIFICATION.
3. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
5. SPOT TAPE HARNESS WHERE NECESSARY. USE A MINIMAL AMOUNT.
6. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
7. WHERE "X" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEEDED FOR TERMINATION.

NOTES:

OPTION B3540-10-000  
SRW, DRW MODELS

A	XX	XX	MALE BLADE, 3/16" 14-16 GA.	X
VENDOR	PART #		DESCRIPTION	QTY

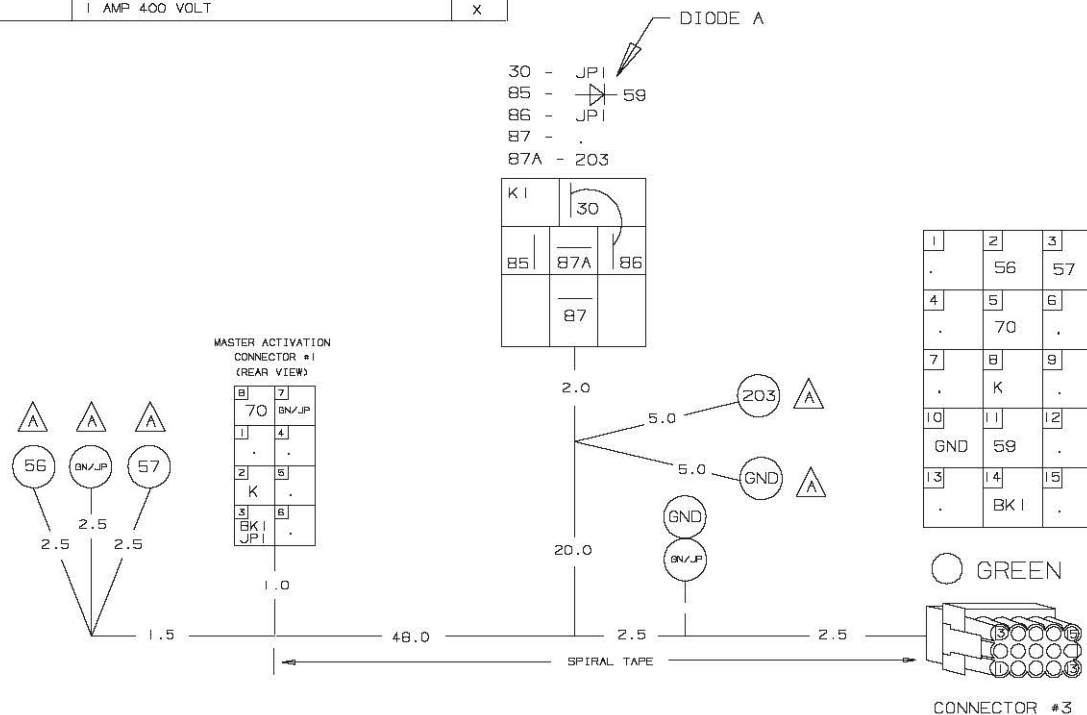
52005628 B

**HARNESS, FOUR LIGHT WARNING SYSTEM**

Option: B3540-10-000  
Effective Date: 9/20/02

CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLING	99916716001	SWITCH CONNECTOR	1
	PED	XX	18-20 GA TERMINAL	X
	PED	XX	14-16 GA TERMINAL	X
3	AMP	XX	14-20 GA. TERMINAL, RECEPTICAL.	X
	AMP	XX	10-12 GA. TERMINAL, RECEPTICAL.	X
	AMP	770023-1	15 POSITION CONNECTOR, PLUG.	1
RELAY K1	HELLA	B7122	HOUSING-RELAY, 5 POSITION.	X
	XX	XX	TERMINAL-FEMALE, 1/4", 14-16 GA.	X
	XX	XX	TERMINAL-FEMALE, 1/4", 10-12 GA.	X
DIODE A	XX	XX	1 AMP 400 VOLT	X

LEAD #	AWG	COLOR	DESCRIPTION
K	16	RED	12V+ IGN. FROM FUSE PANEL.
BK1	16	BLACK	FROM SWITCH TO WELDON RELAY (+).
56	18	RED	WARNING LIGHT TO FLASHER, RED.
GND	18	WHITE	CHASSIS GROUND.
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+)
GN/JP	18	GREEN	GROUND, SWITCH LIGHT JUMPER (-).
JP1	16	BLACK	SWITCH JUMPER, TO RELAY.
203	18	WHITE/RED	OUTPUT FROM RELAY TO CHIME.
57	18	RED	WARNING LIGHT TO FLASHER, RED.
59	18	RED/BLACK	DOOR SIGNAL (GND) TO FLASHER.
.	.	.	.
.	.	.	.



8. SPIRAL TAPE SPACING IS TO BE ONE INCH.
7. WHERE "X" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEEDED FOR TERMINATION.
6. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
5. USE WIRE TIES TO HOLD HARNESS WHERE NEEDED, MINIMUM AMOUNT AND SIZE.
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
3. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
2. TAG HARNESS FOR IDENTIFICATION.
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.

NOTES:

D	XX	XX	BUTT SPLICE, 14-16 GA BLUE.	X
C	XX	XX	RING TERMINAL, #10 STUD, 14-16 GA.	X
B	XX	XX	MALE RECEPT., 1/4", 14-16 GA.	X
A	XX	XX	FEMALE FAST-ON, 1/4", 14-16 GA.	X
	VENDOR	PART #	DESCRIPTION	QTY

OPTION: B3540-10-000  
(SRW, DRW MODELS ONLY)

<b>Thomas</b> SOLUTIONS	<b>52004647 B</b>
<b>HARNESS, FOUR LIGHT WARNING SYSTEM</b>	
Option: B3540-10-000 End Date: 9/5/02	

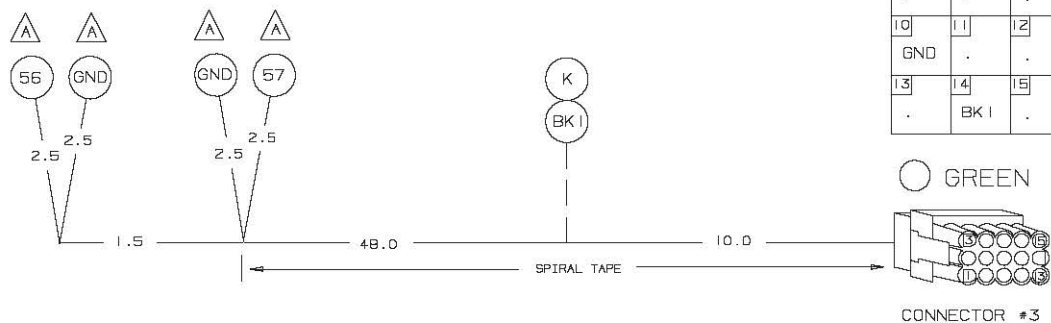




CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLING	99916716001	SWITCH CONNECTOR	.
	PED	12015869	18-20 GA TERMINAL	.
	PED	12015870	14-16 GA TERMINAL	.
3	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	6
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	.
	AMP	770023-1	15 POSITION CONNECTOR, PLUG.	1
RELAY K1	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

5. STRIP INSULATION BACK 3/8" ON  
UNTERMINATED LEADS.  
4. REFER TO DWG. #52001136 FOR HARNESS  
SPECIFICATIONS.  
3. FULLY TAPE BREAKOUTS FOR 3"-  
2" SPACING OTHERWISE.  
2. TAG HARNESS FOR IDENTIFICATION.  
1. CIRCUIT NUMBERS TO BE STAMPED AT  
4" INTERVALS WITH THE PREFIX "B"  
NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
K	16	RED	12V+ IGN. FROM FUSE PANEL.
BK1	16	BLACK	FROM SWITCH TO WELDON RELAY (+).
56	18	RED	WARNING LIGHT TO FLASHER, RED.
GND	18	WHITE	CHASSIS GROUND.
57	18	RED	WARNING LIGHT TO FLASHER, RED.
.	.	.	.
.	.	.	.
.	.	.	.



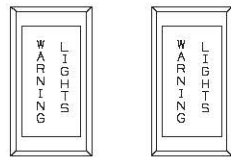
1	2	3
.	56	57
4	5	6
.	.	.
7	8	9
.	K	.
10	11	12
GND	.	.
13	14	15
.	BK1	.

○ GREEN  
CONNECTOR #3

D	.	.	BUTT SPICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	4
	VENDOR	PART #	DESCRIPTION	QTY

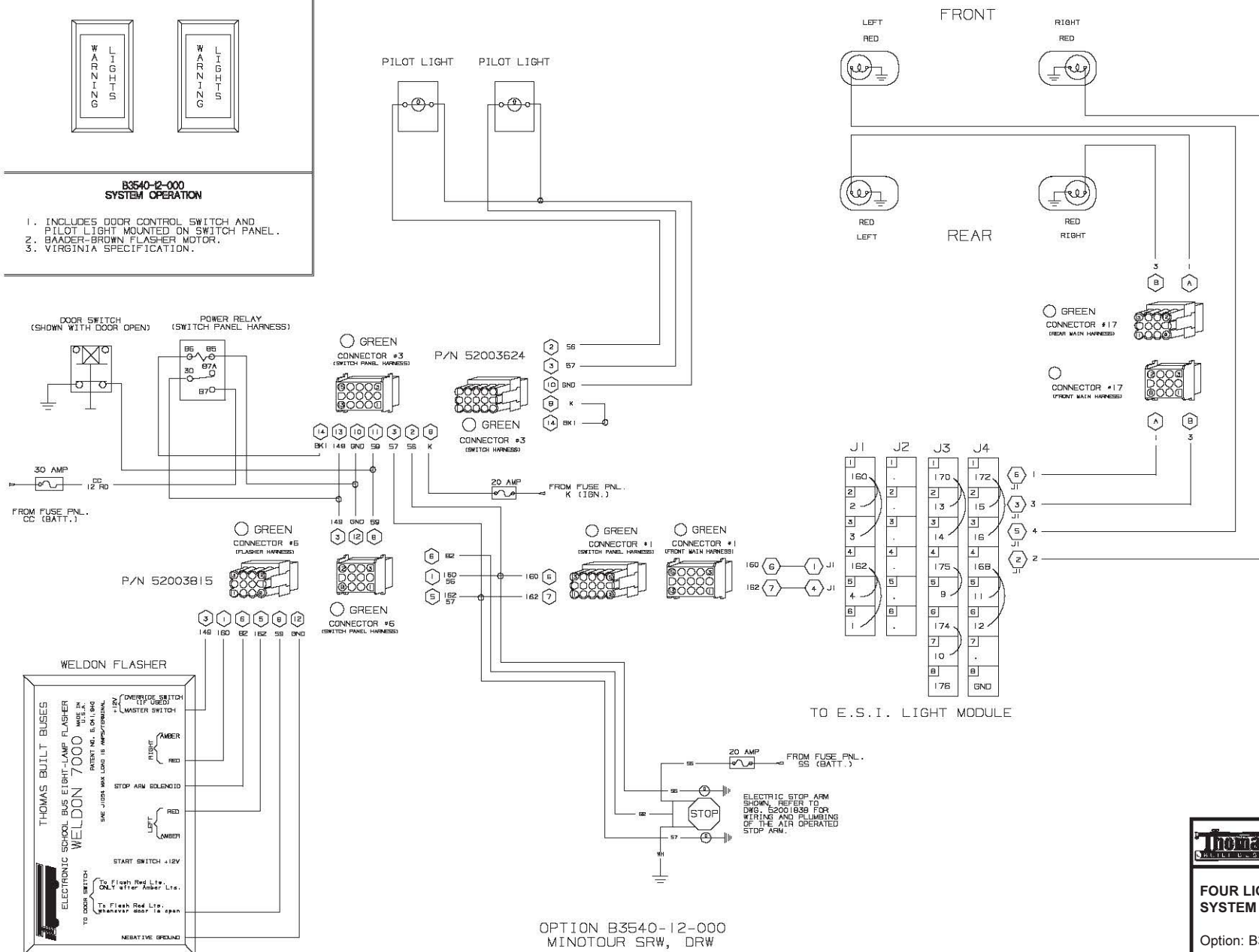
OPTION: B3540-12-000  
(SRW, DRW MODELS ONLY)

<b>Thomas</b> SOLUTIONS	<b>52003624 B</b>
<b>HARNESS, FOUR LIGHT WARNING SYSTEM</b>	
Option: B3540-12-000	



### B3540-12-000 SYSTEM OPERATION

1. INCLUDES DOOR CONTROL SWITCH AND PILOT LIGHT MOUNTED ON SWITCH PANEL.
2. BAADER-BROWN FLASHER MOTOR.
3. VIRGINIA SPECIFICATION.



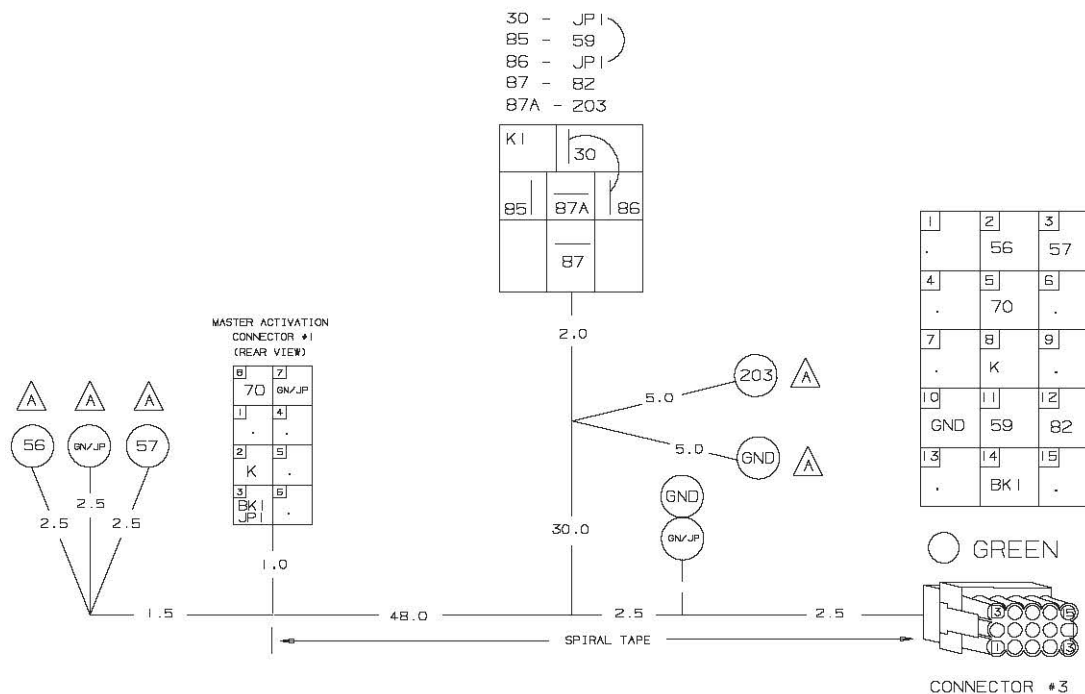
OPTION B3540-12-000  
MINOTOUR SRW, DRW

	<b>52003632 B</b>
<b>FOUR LIGHT WARNING SYSTEM</b>	
Option: B3540-12-000	

CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLING	99916716001	SWITCH CONNECTOR	1
	PED	12015869	16-20 GA TERMINAL	2
	PED	12015870	14-16 GA TERMINAL	2
3	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	8
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	.
	AMP	770023-1	15 POSITION CONNECTOR, PLUG.	1
RELAY K1	HELLA	87122	HOUSING-RELAY, 5 POSITION.	1
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	4
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

5. STRIP INSULATION BACK 3/8" ON  
UNTERMINATED LEADS.  
4. REFER TO DWG. #52001136 FOR HARNESS  
SPECIFICATIONS.  
3. FULLY TAPE BREAKOUTS FOR 3"-  
2" SPACING OTHERWISE.  
2. TAG HARNESS FOR IDENTIFICATION.  
1. CIRCUIT NUMBERS TO BE STAMPED AT  
4" INTERVALS WITH THE PREFIX "B"  
NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
K	16	RED	12V+ IGN. FROM FUSE PANEL.
BK1	16	BLACK	FROM SWITCH TO WELDON RELAY (+).
56	18	RED	WARNING LIGHT TO FLASHER, RED.
GND	18	WHITE	CHASSIS GROUND.
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+).
GN/JP	18	GREEN	GROUND, SWITCH LIGHT JUMPER (-).
JP1	16	BLACK	SWITCH JUMPER, TO RELAY.
203	18	WHITE/RED	OUTPUT FROM RELAY TO CHIME.
57	18	RED	WARNING LIGHT TO FLASHER, RED.
59	18	RED/BLACK	DOOR SIGNAL (GND) TO FLASHER.
82	14	BLUE	OUTPUT FROM RELAY TO THE STOP ARM.
.	.	.	.



OPTION: B3540-13-000  
(SRW, DRW MODELS ONLY)

D	.	.	BUTT SPICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	5
	VENDOR	PART #	DESCRIPTION	QTY

52003852 B

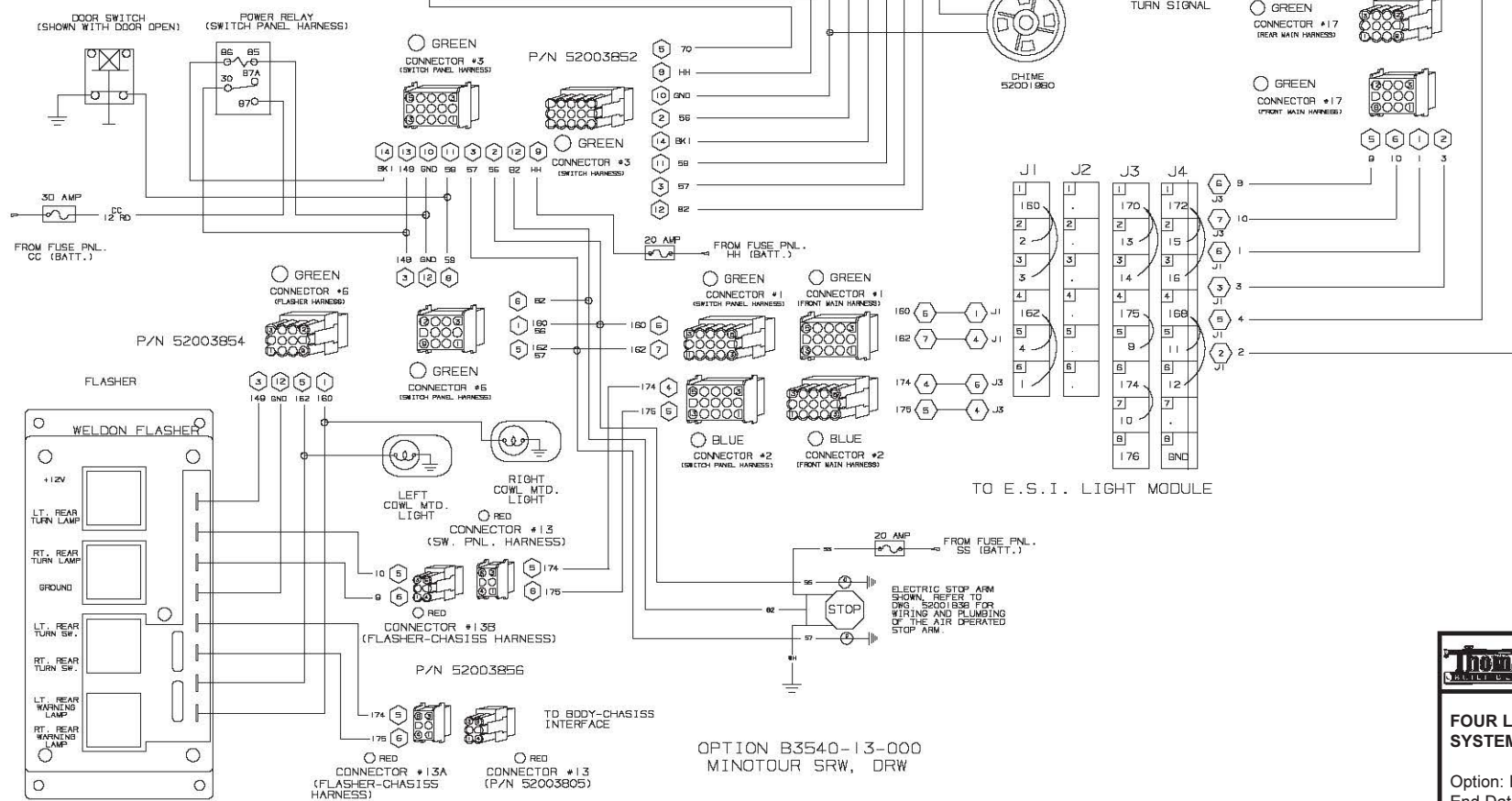
**HARNESS, FOUR LIGHT  
WARNING SYSTEM**

Option: B3540-13-000  
End Date: 9/5/02




# B3540-13-000 SYSTEM OPERATION

1. FOUR 7" RED LIGHTS.
2. TWO 7" COWL MOUNTED LIGHTS.
3. TWO 7" LIGHTS INCORPORATED IN THE REAR TURN SIGNALS.
4. RED LIGHTS ACTIVATED BY A SWITCH LOCATED ON THE SWITCH PANEL.
5. RED PILOT LIGHT IN SWITCH PANEL TO INDICATE SYSTEM OPERATION.
6. STOP ARM ONLY ACTIVATED WHEN ENTRANCE DOOR IS OPEN AND WARNING LIGHTS ACTIVATED.
7. ELS MODEL B-4 FLASHER.
8. WISCONSIN SPECIFICATION.

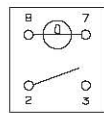


OPTION B3540-13-000  
MINOTOUR SRW, DRW

**52003848 C**

**FOUR LIGHT WARNING SYSTEM**  
Option: B3540-13-000  
End Date: 9/5/02

# SWITCH LAYOUT



CIRCUIT



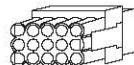
INTER  
52003165

INTER SWITCH  
52003165  
CONNECTOR #23  
(REAR VIEW)

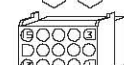


H 14RD 21 16BK

GREEN  
CONNECTOR #3  
(SWITCH PANEL HARNESS)



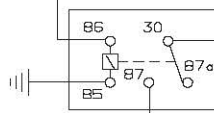
H 21A



GREEN  
CONNECTOR #3  
(FRONT PANEL HARNESS)

+12V BATTERY  
15 AMP  
LOWER BLK POS. #5

21A 16BK

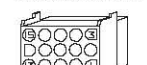


40 AMP  
RELAY  
52003303

15 AMP  
UPPER BLK POS. #6

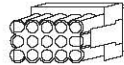
21 14BK

GREEN  
CONNECTOR #1  
(SWITCH PANEL HARNESS)



21 19

GREEN  
CONNECTOR #1  
(MAIN BODY HARNESS)

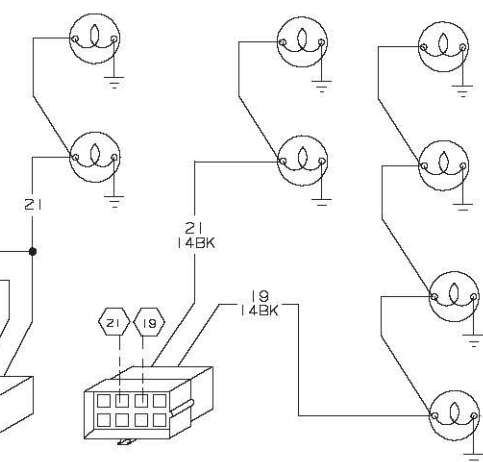


21 14BK 19 14BK

21 14BK 19 14BK

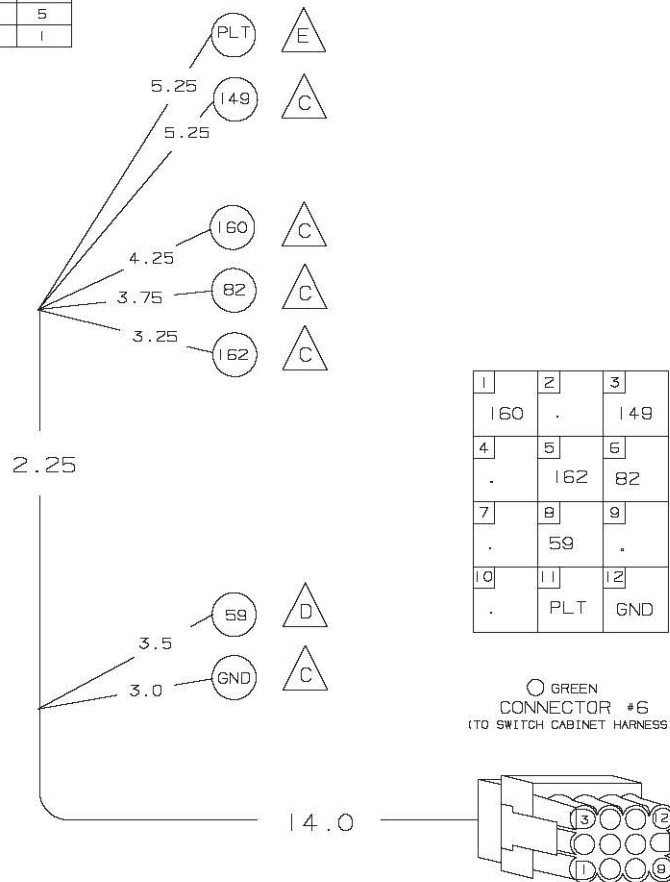
CONNECTOR #15

## INTERIOR LIGHTS



	52003854 B
HARNESS, E.L.S. B-4 FLASHER	
Option: B3540-13-000 End Date: 9/5/02	


CONN	VENDOR	PART #	DESCRIPTION	QTY
3	AMP	770006-3	14-16 GA. TERMINAL, RECEPTICAL.	2
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	5
	AMP	770022-1	12 POSITION CONNECTOR, PLUG.	1



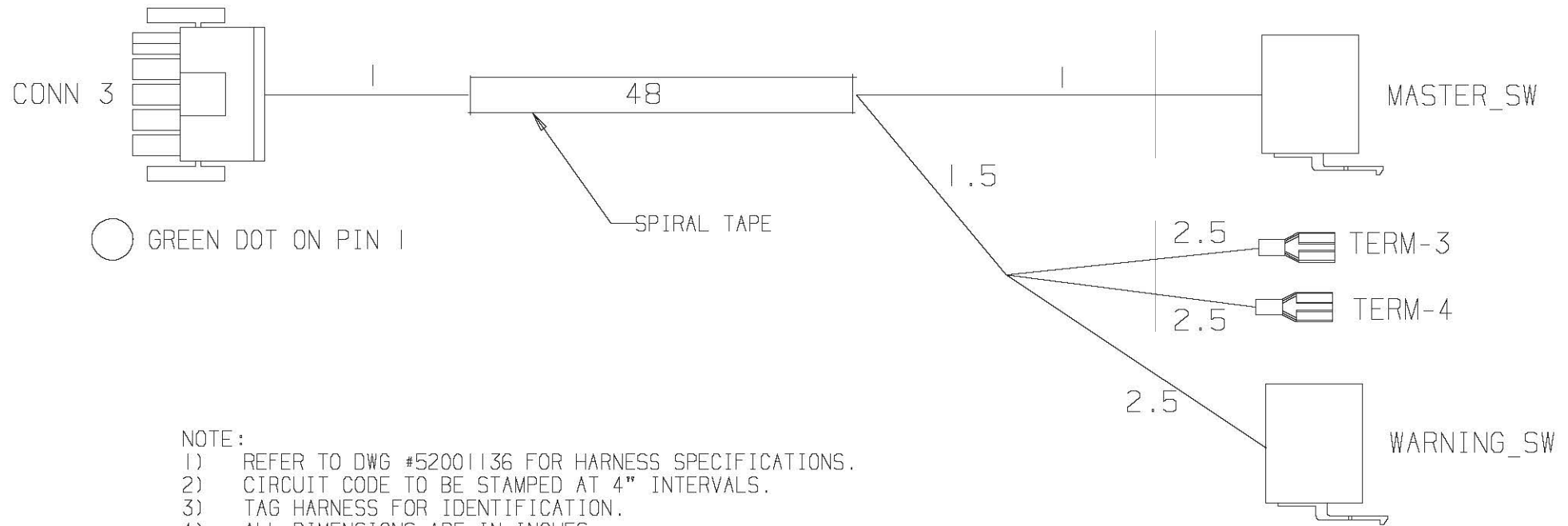
LEAD #	AWG	COLOR	DESCRIPTION
59	16	RED/BLACK	DOOR SIGNAL (GND) TO FLASHER.
82	12	BLUE	FEED TO STOP ARM SOLENOID.
149	12	BLACK	FLASHER POWER.
160	12	BLACK	WARNING LIGHT MONITOR FEED. (RED)
162	12	ORANGE	WARNING LIGHT MONITOR FEED. (RED)
GND	12	WHITE	FLASHER GROUND.
PLT	16	RED	PILOT LIGHT FEED FROM CUR. SENSOR
.	.	.	.
.	.	.	.

5. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
  4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
  3. USE WIRE TIES TO SECURE HARNESS MINIMUM SIZE AND QUANTITY.
  2. TAG HARNESS FOR IDENTIFICATION.
  1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"
- NOTES: ON ALL LEADS.

E	.	.	MALE BLADE, 3/16" 14-16 GA.	1
D	.	.	FEMALE FAST ON, 1/4" 16-18 GA.	1
C	.	.	FEMALE FAST ON, 1/4" 10-12 GA.	5
B	.	.	RING TERMINAL, 3/8" STUD, 10-12 GA.	0
A	.	.	BUTT-SPLICE, 14-16 GA., INSULATED.	0
	VENDOR	PART #	DESCRIPTION	QTY

	<b>52003815 B</b>
<b>HARNESS, WELDON 7000 FLASHER, FOUR LIGHT SYSTEM</b>	
End Date: 6/20/02	





NOTE:

- 1) REFER TO DWG #52001136 FOR HARNESS SPECIFICATIONS.
- 2) CIRCUIT CODE TO BE STAMPED AT 4" INTERVALS.
- 3) TAG HARNESS FOR IDENTIFICATION.
- 4) ALL DIMENSIONS ARE IN INCHES.
- 5) ALL WIRE LENGTHS ON DRAWING ARE BASED ON DIMS BETWEEN WIRE "BREAK-OUTS" AND/OR BACK ENDS OF CONN. SHELLS.
- 6) (X) USE TERMINALS APPROPRIATE TO WIRE SIZE BASED ON CONNECTOR MFR. SPECIFICATIONS.
- 7) LABEL SWITCH CONNECTORS.

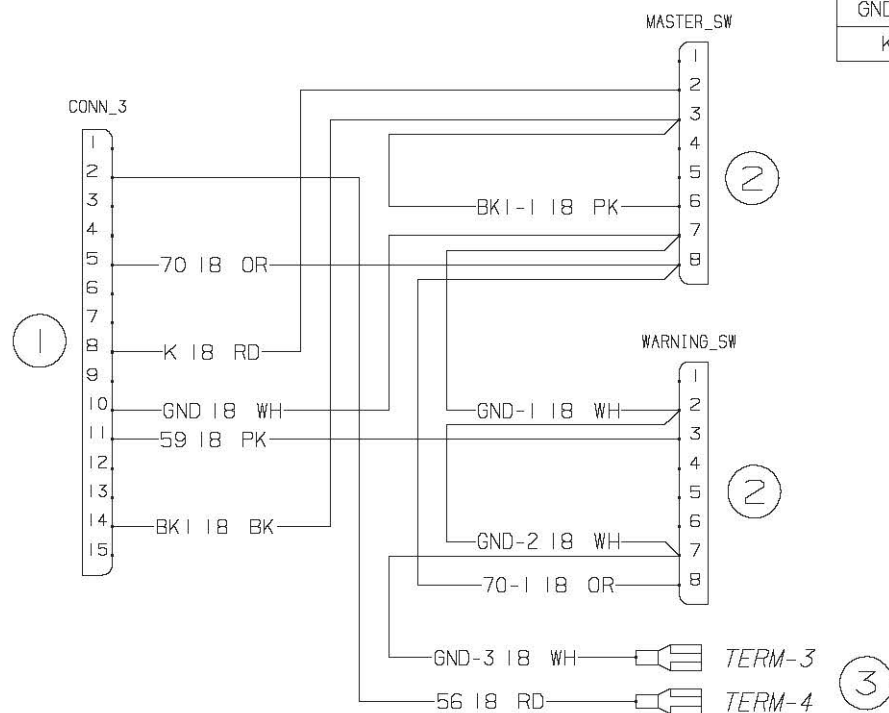
OPTION: B3541-16-000

Sheet 1 of 2

<b>Thomas</b> SOLUTIONS	52005415 B
<b>HARNESS, FOUR LIGHT WARNING SYSTEM</b>	
Option: B3541-16-000 End Date: 9/5/02	

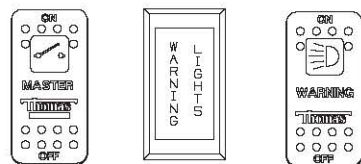
ITEM	VENDOR	PART NO.	DESCRIPTION
1	AMP	770023-1	15 POSITION CONNECTOR, PLUG
	AMP	X	TERMINAL, RECEPTICAL 14-20 GA.
2	CARLING (OR EQUIVALENT)	99916716001	SWITCH CONNECTOR
	PACKARD	X	TERMINAL, FEMALE, 630 SERIES, TIN/BRASS
3	AMP	X	TERMINAL-FEMALE, 250 FASTON, PRE INSULATED

WIRE CKT CODE	FROM		TO		COLOR	GAUGE	CIRCUIT DESCRIPTION
	CONNECTOR	PIN NO.	CONNECTOR	PIN NO.			
56	TERM-4	1	CONN_3	2	RED (RD)	18	RED WARNING LIGHTS
59	CONN_3	11	WARNING_SW	3	PINK (PK)	18	DOOR SIGNAL
70	MASTER_SW	8	CONN_3	5	ORANGE (OR)	18	PANEL LIGHTS
70-1	MASTER_SW	8	WARNING_SW	8	ORANGE (OR)	18	PANEL LIGHTS
BK1	MASTER_SW	3	CONN_3	14	BLACK (BK)	18	SWITCH TO RELAY
BK1-1	MASTER_SW	3	MASTER_SW	6	PINK (PK)	18	SWITCH TO RELAY
GND	MASTER_SW	7	CONN_3	10	WHITE (WH)	18	GROUND
GND-1	WARNING_SW	2	MASTER_SW	7	WHITE (WH)	18	GROUND
GND-2	WARNING_SW	7	WARNING_SW	2	WHITE (WH)	18	GROUND
GND-3	TERM-3	1	WARNING_SW	7	WHITE (WH)	18	GROUND
K	MASTER_SW	2	CONN_3	8	RED (RD)	18	IGNITION POWER



Sheet 2 of 2

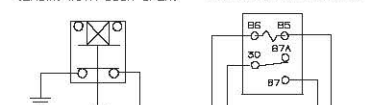
<b>Thomas</b> SOLUTIONS	<b>52005415 B</b>
<b>HARNESS, FOUR LIGHT WARNING SYSTEM</b>	
Option: B3541-16-000	
End Date: 9/5/02	



# **B3541-16-000 SYSTEM OPERATION**

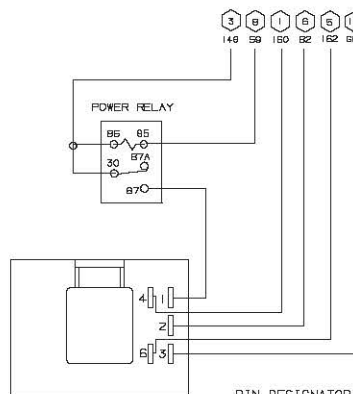
1. INCLUDES SWITCH AND PILOT LIGHT, WITH MASTER SWITCH MOUNTED ON SWITCH PANEL.
2. INCLUDES DOOR CONTROL SWITCH.
3. QUEBEC SPECIFICATION.

DOOR SWITCH (SHOWN WITH DOOR OPEN) POWER RELAY (SWITCH PANEL HARNESS)



30 AMP  
12 RD  
FROM FUSE PNL.  
CC (BATT.)

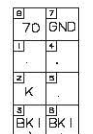
P/N 52003B15



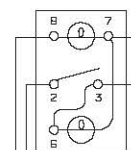
FLASHER MODULE  
52004517

PIN DESIGNATOR  
(LW149)  
21 STOP ARM (LW62)  
33 GROUND (GND)  
41 RED LIGHT (LW56)  
61 RED LIGHT (LW57)

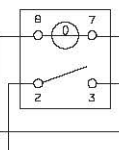
MASTER/ACTIVATION  
SWITCH  
CONNECTOR #1  
(REAR VIEW)



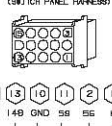
PILOT LIGHT



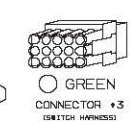
ACTIVATION  
SWITCH  
CONNECTOR #2  
(REAR VIEW)



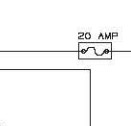
GREEN  
CONNECTOR #3  
(SWITCH PANEL HARNESS)



P/N 52003621

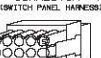


GREEN  
CONNECTOR #3  
(SWITCH HARNESS)



20 AMP  
FROM FUSE PNL.  
K (IGN.)

GREEN  
CONNECTOR #1  
(SWITCH PANEL HARNESS)



GREEN  
CONNECTOR #1  
(TRUCK MAIN HARNESS)



GREEN  
CONNECTOR #1  
(TRUCK MAIN HARNESS)



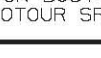
GREEN  
CONNECTOR #1  
(TRUCK MAIN HARNESS)



GREEN  
CONNECTOR #1  
(TRUCK MAIN HARNESS)



GREEN  
CONNECTOR #1  
(TRUCK MAIN HARNESS)



OPTION B3541-16-000  
MINOTOUR SRW, DRW

FRONT



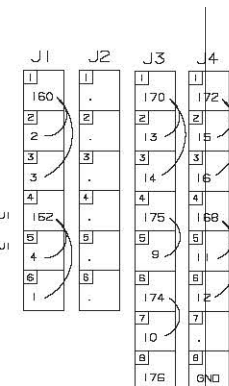
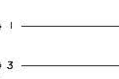
REAR



GREEN  
CONNECTOR #17  
(REAR MAIN HARNESS)



GREEN  
CONNECTOR #17  
(FRONT MAIN HARNESS)



TO E.S.I. LIGHT MODULE

20 AMP  
FROM FUSE PNL.  
SS (BATT.)

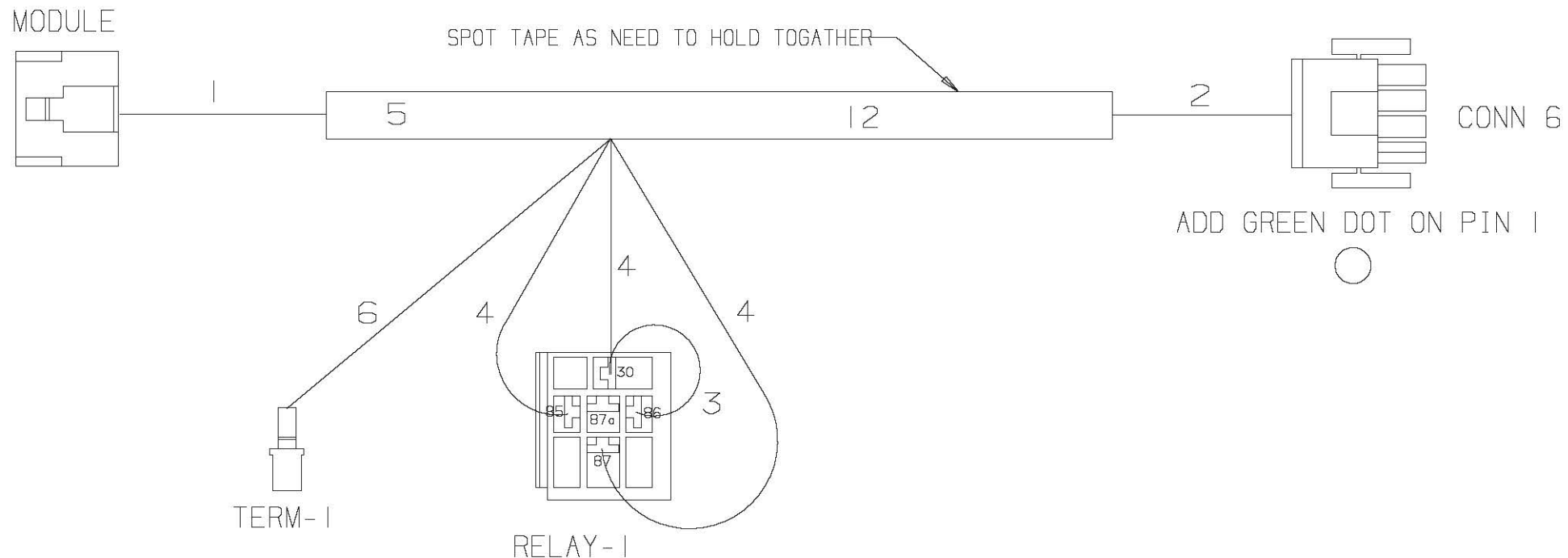
ELECTRIC STOP ARM  
SHOWN, REFER TO  
P/N 52001638 FOR  
WIRING AND PLUMBING  
OF THE AIR OPERATED  
STOP ARM.



52005416 B

**FOUR LIGHT WARNING  
SYSTEM**

Option: B3541-16-000  
Effective Date: 1/14/02  
End Date: 9/5/02



NOTE:

- 1) REFER TO DWG #52001136 FOR HARNESS SPECIFICATIONS.
- 2) CIRCUIT CODE TO BE STAMPED AT 4" INTERVALS.
- 3) TAG HARNESS FOR IDENTIFICATION.
- 4) ALL DIMENSIONS ARE IN INCHES.
- 5) ALL WIRE LENGTHS ON DRAWING ARE BASED ON DIMS BETWEEN WIRE "BREAK-OUTS" AND/OR BACK ENDS OF CONN. SHELLS.
- 6) (X) USE TERMINALS APPROPRIATE TO WIRE SIZE BASED ON CONNECTOR MFR. SPECIFICATIONS.
- 7) LABEL SWITCH CONNECTORS.
- 8) SEE DRAWING 52003438 FOR PINNING OF RELAY BLOCKS.

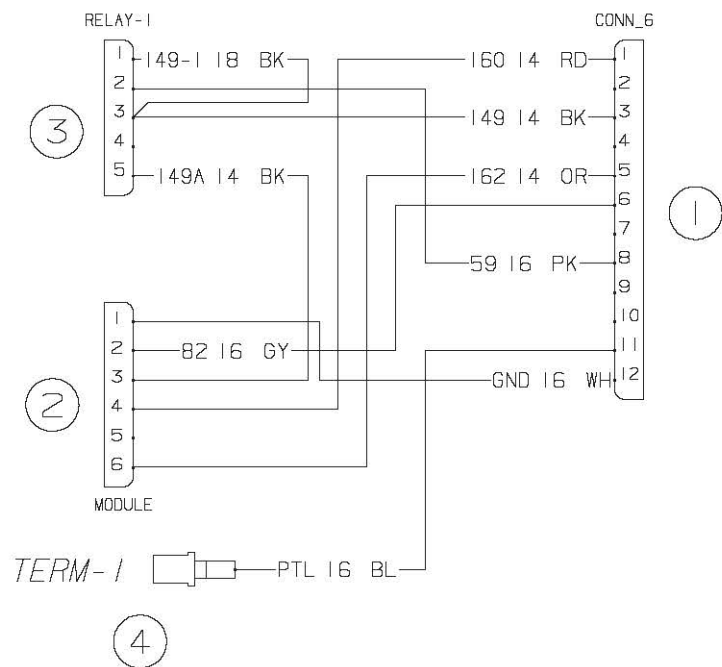
OPTION: B3541-16-000

Sheet 1 of 2

<b>Thomas</b> SOLUTIONS	<b>52005417 C</b>
<b>FOUR LIGHT WARNING SYSTEM</b>	
Option: B3541-16-000	
Effective Date: 1/14/02	
End Date: 9/5/02	

ITEM	VENDOR	PART NO.	DESCRIPTION
1	AMP	770022-1	12 POSITION CONNECTOR, PLUG
		X	14-16 GA. TERMINAL, RECEPTICAL
2	AMP	171898-1	FASTON CONNECTOR, .250 GP
		X	TERMINAL, .250 TIN/BRASS
3	BOSCH OR EQUIVALENT	3-334-485-008	RELAY BLOCK
	AMP	X	TERMINAL, FRMALE TIN/BRASS
4	AMP	X	TERMINAL-MALE, .187, PRE INSULATED FULL COVER

WIRE CKT CODE	FROM		TO		COLOR	GAUGE	CIRCUIT DESCRIPTION
	CONNECTOR	PIN NO.	CONNECTOR	PIN NO.			
59	RELAY-1	2	CONN_6	8	PINK (PK)	16	DOOR SIGNAL
82	MODULE	2	CONN_6	6	GRAY (GY)	16	STOP ARM SIGNAL
149	CONN_6	3	RELAY-1	3	BLACK (BK)	14	FLASHER POWER
160	MODULE	4	CONN_6	1	RED (RD)	14	RED WARNING LIGHTS
162	MODULE	6	CONN_6	5	ORANGE (OR)	14	RED WARNING LIGHTS
149-1	RELAY-1	3	RELAY-1	1	BLACK (BK)	18	FLASHER POWER
149A	MODULE	3	RELAY-1	5	BLACK (BK)	14	FLASHER POWER
GND	MODULE	1	CONN_6	12	WHITE (WH)	16	GROUND
PTL	CONN_6	11	TERM-1	1	BLUE (BL)	16	PANEL LIGHT FEED



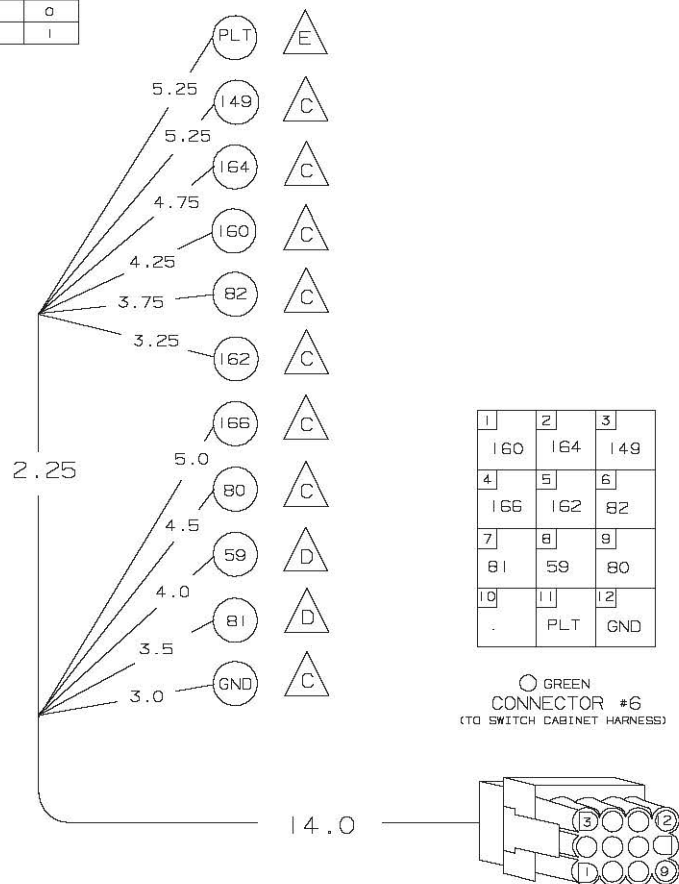
Sheet 2 of 2

<b>Thomas</b> SAFETY SYSTEMS	<b>52005417 C</b>
<b>FOUR LIGHT WARNING SYSTEM</b> Option: B3541-16-000 Effective Date: 1/14/02 End Date: 9/5/02	

**EIGHT LIGHT  
WARNING SYSTEM  
SECTION**



CONN	VENDOR	PART #	DESCRIPTION	QTY
3	AMP	770006-3	14-16 GA. TERMINAL, RECEPTICAL.	11
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	0
	AMP	770022-1	12 POSITION CONNECTOR, PLUG.	1

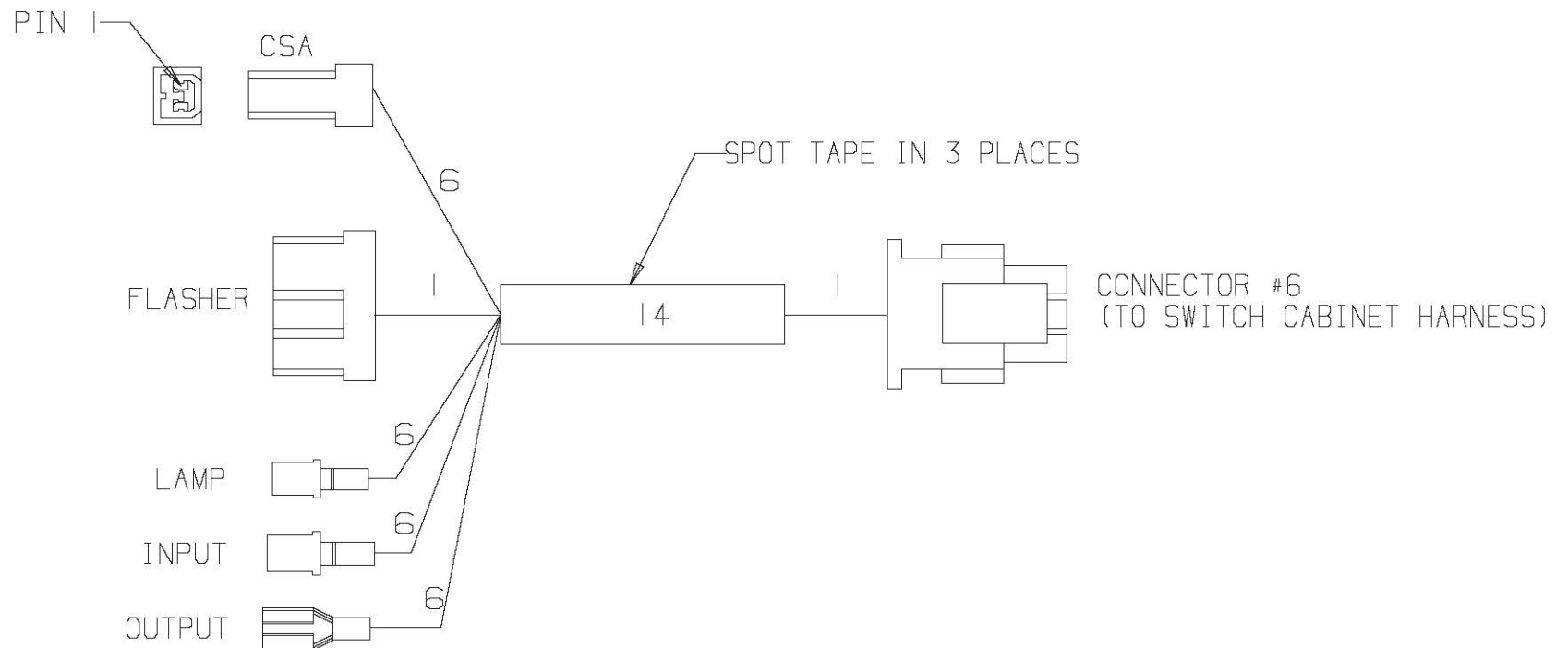


LEAD #	AWG	COLOR	DESCRIPTION
149	12	BLACK	FLASHER POWER.
164	12	BLUE	WARNING LIGHT MONITOR FEED. (AMBER)
160	12	BLACK	WARNING LIGHT MONITOR FEED. (RED)
82	12	BLUE	FEED TO STOP ARM SOLENOID.
162	12	ORANGE	WARNING LIGHT MONITOR FEED. (RED)
166	12	RED	WARNING LIGHT MONITOR FEED. (AMBER)
80	12	GREEN	ACTIVATION SW. (AMBER) TO FLASHER.
59	16	RED/BLACK	DOOR SIGNAL (GND) TO FLASHER.
81	16	BLUE	EMERGENCY SWITCH TO FLASHER.
GND	12	WHITE	FLASHER GROUND.
PLT	16	RED	PILOT LIGHT FEED FROM CUR. SENSOR
.	.	.	.
.	.	.	.

5. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.  
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.  
3. USE WIRE TIES TO SECURE HARNESS MINIMUM SIZE AND QUANTITY.  
2. TAG HARNESS FOR IDENTIFICATION.  
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"  
NOTES: ON ALL LEADS.

E	.	.	MALE BLADE, 3/16" 14-16 GA.	1
D	.	.	FEMALE FAST ON, 1/4" 16-18 GA.	2
C	.	.	FEMALE FAST ON, 1/4" 10-12 GA.	8
B	.	.	RING TERMINAL, 3/8" STUD, 10-12 GA.	0
A	.	.	BUTT-SPLICE, 14-16 GA., INSULATED.	0
	VENDOR	PART #	DESCRIPTION	QTY


<b>Thomas</b> SOLUTIONS	<b>52003592 B</b>
<b>HARNESS, WELDON 7000 FLASHER</b>	
End Date: 3/31/02	



NOTE:

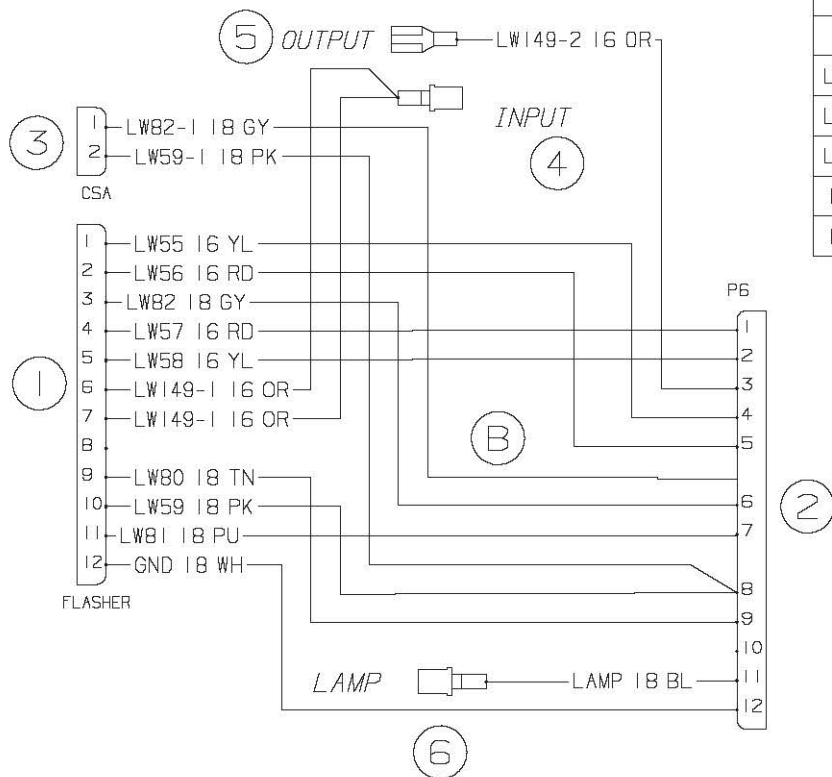
- 1) REFER TO DWG #52001136 FOR HARNESS SPECIFICATIONS.
- 2) CIRCUIT CODE TO BE STAMPED AT 4" INTERVALS.
- 3) TAG HARNESS FOR IDENTIFICATION.
- 4) ALL DIMENSIONS ARE IN INCHES.
- 5) ALL WIRE LENGTHS ON DRAWING ARE BASED ON DIMS BETWEEN WIRE "BREAK-OUTS" AND/OR BACK ENDS OF CONN. SHELLS.
- 6) (X) USE TERMINALS APPROPRIATE TO WIRE SIZE BASED ON CONNECTOR MFR. SPECIFICATIONS.
- 7) CONNECTOR "FLASHER" TO BE LABELED IN BLACK INK.

Sheet 1 of 2

	52005383 C
HARNESS, FLASHER w/CONNECTOR	
Effective Date: 4/1/02 End Date: 8/19/02	

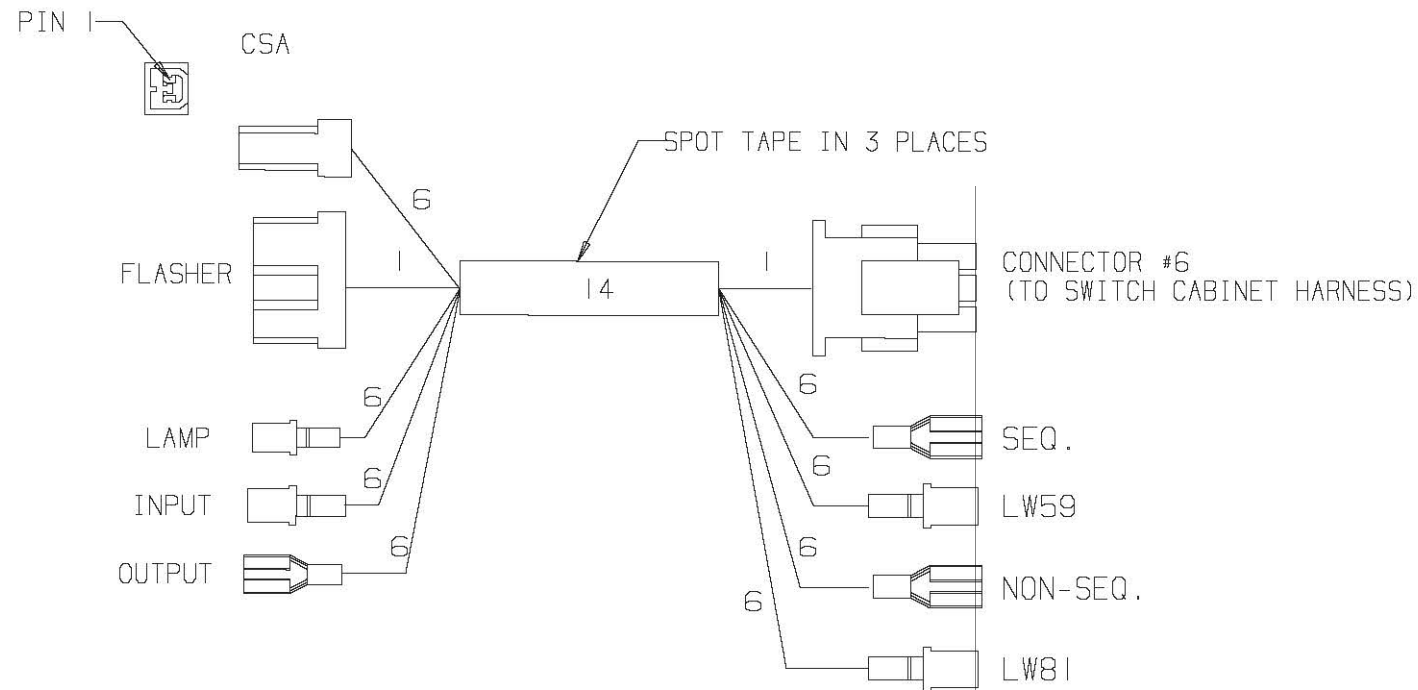
ITEM	VENDOR	PART NO.	DESCRIPTION
1	AMP	173851-1	MULTILOCK CONNECTOR, 070 12P
		173631-6	FEMALE TERMINAL, TIN/BRONZE
2	AMP	770022-1	MATE-N-LOCK II CONNECTOR, 12P
		770006-3	FEMALE TERMINAL, TIN/BRONZE
3	AMP	174463-1	MULTILOCK CONNECTOR, 070 2P
		173631-6	FEMALE TERMINAL, TIN/BRONZE
4	AMP	X	TERMINAL - MALE, .250 FASTON, FULLY INSULATED
5	AMP	X	TERMINAL - FEMALE, .250 FASTON, FULLY INSULATED
6	AMP	X	TERMINAL - MALE, .187 FASTON, FULLY INSULATED (PINK)

WIRE CKT CODE	FROM		TO		COLOR	GAUGE	CIRCUIT DESCRIPTION
	CONNECTOR	PIN NO.	CONNECTOR	PIN NO.			
GND	P6	12	FLASHER	12	WHITE (WH)	18	GROUND
LAMP	LAMP	1	P6	11	BLUE (BL)	18	LAMP LIGHT
LW55	FLASHER	1	P6	4	YELLOW (YL)	16	WARNING LIGHT (AMBER)
LW56	FLASHER	2	P6	5	RED (RD)	16	WARNING LIGHT (RED)
LW57	FLASHER	4	P6	1	RED (RD)	16	WARNING LIGHT (RED)
LW58	P6	2	FLASHER	5	YELLOW (YL)	16	WARNING LIGHT (AMBER)
LW59	P6	8	FLASHER	10	PINK (PK)	18	DOOR SWITCH SIGNAL (GROUND)
LW80	P6	9	FLASHER	9	TAN (TN)	18	FLASHER START SIGNAL
LW81	P6	7	FLASHER	11	PURPLE (PU)	18	DOOR OPEN (ACTIVE LOW)
LW82	P6	6	FLASHER	3	GRAY (GY)	18	STOP ARM SIGNAL
LW149-1	FLASHER	6	INPUT	1	ORANGE (OR)	16	INPUT-WARNING LIGHT MONITOR
LW149-1	INPUT	1	FLASHER	7	ORANGE (OR)	16	INPUT-WARNING LIGHT MONITOR
LW149-2	P6	3	OUTPUT	1	ORANGE (OR)	16	OUTPUT-WARNING LIGHT MONITOR
LW59-1	P6	8	CSA	2	PINK (PK)	18	DOOR SWITCH SIGNAL (GROUND)
LW82-1	P6	6	CSA	1	GRAY (GY)	18	STOP ARM SIGNAL



Sheet 2 of 2

<b>Thomas</b> SOLUTIONS	<b>52005383 C</b>
<b>HARNES, FLASHER w/CONNECTOR</b>	
Effective Date: 4/1/02 End Date: 8/19/02	



NOTE:

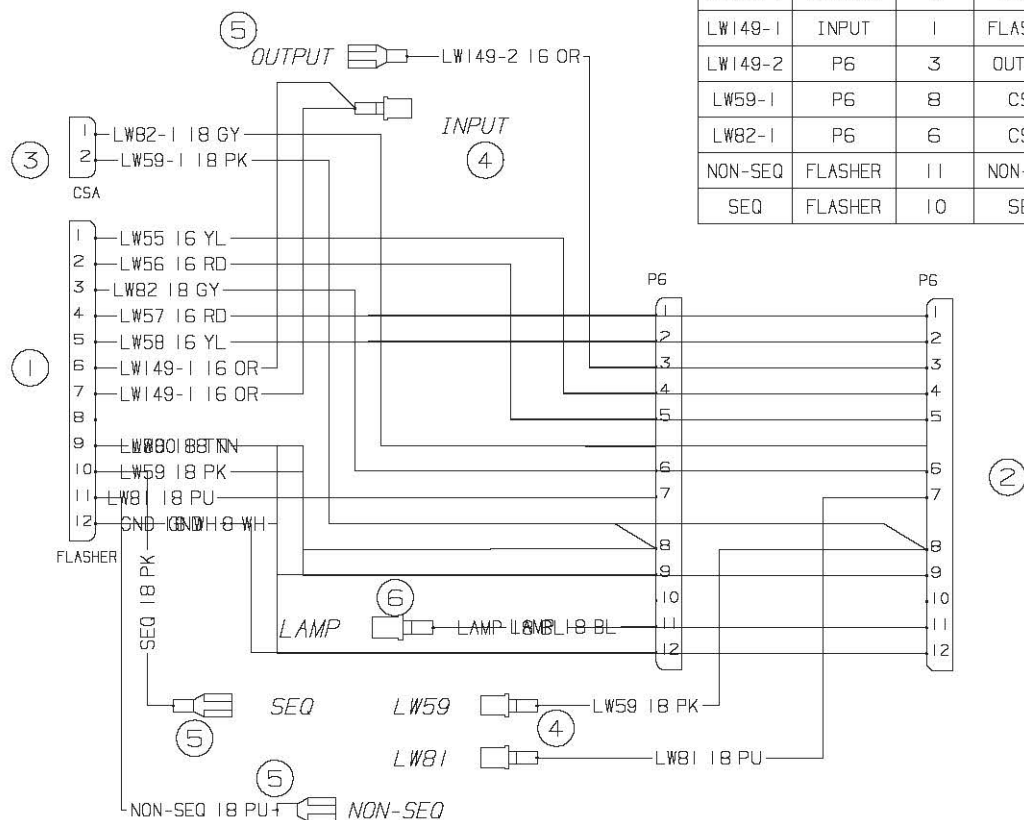
- 1) REFER TO DWG #52001136 FOR HARNESS SPECIFICATIONS.
- 2) CIRCUIT CODE TO BE STAMPED AT 4" INTERVALS.
- 3) TAG HARNESS FOR IDENTIFICATION.
- 4) ALL DIMENSIONS ARE IN INCHES.
- 5) ALL WIRE LENGTHS ON DRAWING ARE BASED ON DIMS BETWEEN WIRE "BREAK-OUTS" AND/OR BACK ENDS OF CONN. SHELLS.
- 6) (X) USE TERMINALS APPROPRIATE TO WIRE SIZE BASED ON CONNECTOR MFR. SPECIFICATIONS.
- 7) CONNECTOR "FLASHER" TO BE LABELED IN BLACK INK.

Sheet 1 of 2

<b>Thomas</b> SOLUTIONS	<b>52005624 B</b>
<b>HARNESS, FLASHER w/CONNECTOR</b>	
Effective Date: 8/20/02 End Date: 9/6/02	

ITEM	VENDOR	PART NO.	DESCRIPTION
1	AMP	173851-1	MULTILOCK CONNECTOR, 070 12P
		173631-6	FEMALE TERMINAL, TIN/BRONZE
2	AMP	770022-1	MATE-N-LOCK II CONNECTOR, 12P
		770006-3	FEMALE TERMINAL, TIN/BRONZE
3	AMP	174463-1	MULTILOCK CONNECTOR, 070 2P
		173631-6	FEMALE TERMINAL, TIN/BRONZE
4	AMP	X	TERMINAL - MALE, .250 FASTON, FULLY INSULATED
5	AMP	X	TERMINAL - FEMALE, .250 FASTON, FULLY INSULATED
6	AMP	X	TERMINAL - MALE, .187 FASTON, FULLY INSULATED (PINK)

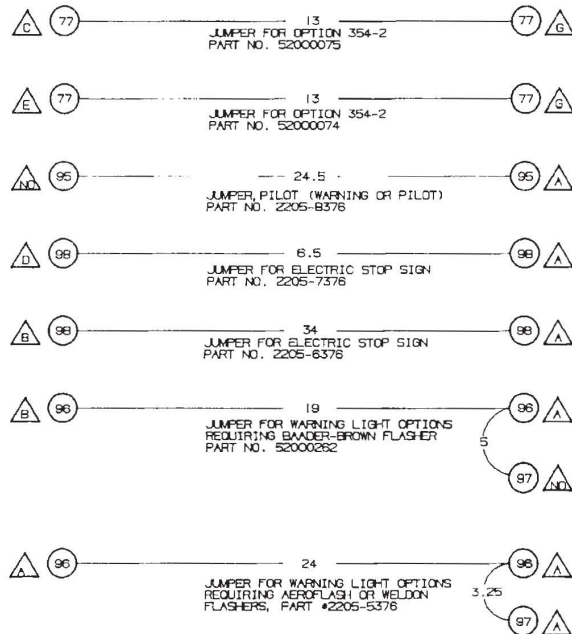
WIRE CKT CODE	FROM		TO		COLOR	GAUGE	CIRCUIT DESCRIPTION
	CONNECTOR	PIN NO.	CONNECTOR	PIN NO.			
GND	P6	12	FLASHER	12	WHITE (WH)	18	GROUND
LAMP	LAMP	1	P6	11	BLUE (BL)	18	LAMP LIGHT
LW55	FLASHER	1	P6	4	YELLOW (YL)	16	WARNING LIGHT (AMBER)
LW56	FLASHER	2	P6	5	RED (RD)	16	WARNING LIGHT (RED)
LW57	FLASHER	4	P6	1	RED (RD)	16	WARNING LIGHT (RED)
LW58	P6	2	FLASHER	5	YELLOW (YL)	16	WARNING LIGHT (AMBER)
LW59	P6	8	LW59	1	PINK (PK)	18	DOOR SWITCH SIGNAL (GROUND)
LW80	P6	9	FLASHER	9	TAN (TN)	18	FLASHER START SIGNAL
LW81	P6	7	LW81	1	PURPLE (PU)	18	DOOR OPEN (ACTIVE LOW)
LW82	P6	6	FLASHER	3	GRAY (GY)	18	STOP ARM SIGNAL
LW149-1	FLASHER	6	INPUT	1	ORANGE (OR)	16	INPUT-WARNING LIGHT MONITOR
LW149-1	INPUT	1	FLASHER	7	ORANGE (OR)	16	INPUT-WARNING LIGHT MONITOR
LW149-2	P6	3	OUTPUT	1	ORANGE (OR)	16	OUTPUT-WARNING LIGHT MONITOR
LW59-1	P6	8	CSA	2	PINK (PK)	18	DOOR SWITCH SIGNAL (GROUND)
LW82-1	P6	6	CSA	1	GRAY (GY)	18	STOP ARM SIGNAL
NON-SEQ	FLASHER	11	NON-SEQ	1	PURPLE (PU)	18	RED LGTS W/ DOOR OPEN
SEQ	FLASHER	10	SEQ	1	PINK (PK)	18	RED LGTS FOLLOW AMBER



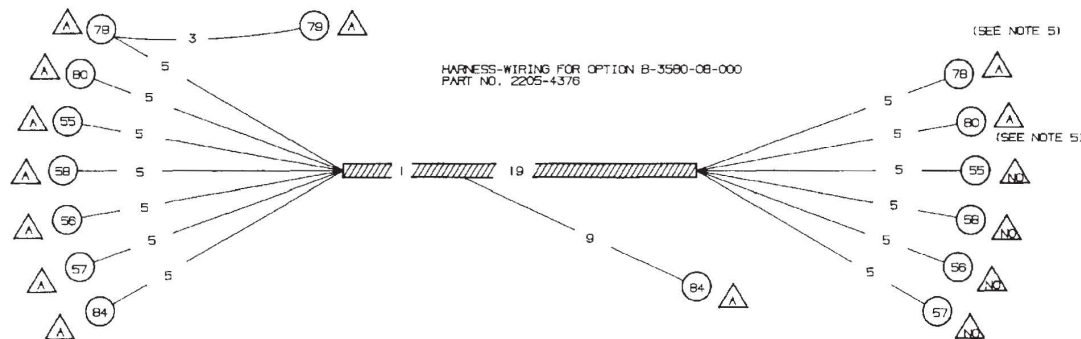
NOTE:  
A COPY OF 52005624.DWG MUST BE CHECKED OUT  
WITH THIS DRAWING TO VIEW PAGE 2

Sheet 2 of 2

<b>Thomas</b> SAFETY EQUIPMENT	<b>52005624 B</b>
<b>HARNES, FLASHER w/CONNECTOR</b>	
Effective Date: 8/20/02 End Date: 9/6/02	



CIR.	GA.	COLOR	DESCRIPTION	L6.
55	16	YELLOW	WARNING LIGHT PILOT LIGHT	30
56	16	RED	WARNING LIGHT PILOT LIGHT	30
57	16	RED	WARNING LIGHT PILOT LIGHT	30
58	16	YELLOW	WARNING LIGHT PILOT LIGHT	30
77	10	RED	FUSE BOARD TO RELAY	13
77	10	RED	FUSE BOARD TO FLASHER MOTOR	13
78	14	BLACK	MASTER SWITCH TERMINAL ON WELDON FLASHER TO	30
79	14	BLACK	MASTER SWITCH TO START SWITCH	3
80	14	GREEN	START SWITCH TO START SWITCH (+12V) TERMINA	30
84	14	WHITE	MASTER SWITCH TO FUSE BOARD	15
95	16	YELLOW	AMBER PILOT OR BRAKE PILOT	24.5
96	16	BLACK	JUMPER FOR 358-3, 4, 5 & 6 W/AEROFASH FLASHE	24
97	16	BLACK	JUMPER TO START SWITCH	3.25
98	16	BLACK	JUMPER FOR 358-3, 4, 5 & 6 W/BAADER-BROWN FLA	19
97	16	BLACK	JUMPER TO START SWITCH	5
98	16	RED	ELECTRIC STOP SIGN SWITCH	6.5
98	16	RED	ELECTRIC STOP SIGN SWITCH	34



5. FOR OPTION B-3720-02-000 OR OPTION B-3720-03-000 (BAADER BROWN FLASHER) REPLACE FEMALE TERMINAL WITH A PACKARD "56" SERIES LONG MALE BLADE.
4. STRIP INSULATION BACK 1/2" ON UNTERMINATED LEADS.
3. SEE DRAWING #52001136 FOR HARNESS SPECIFICATIONS.
2. TAG HARNESS FOR IDENTIFICATION.
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTER WITH PREFIX "B" ON ALL LEADS.
- NOTES:

TERM	DESCRIPTION
G	FEMALE PUSH-ON, 1/4", 10 AWG.
F	OPEN END SPADE FOR #10 STUD, 10 AWG.
E	RING TERMINAL, 5/16" STUD, 10 AWG.
D	RING TERMINAL, #10 STUD, 16-14 AWG.
C	LONG MALE BLADE, 1/4", 10-12 AWG. PACKARD "56"
B	MALE BLADE, 1/4", 16-14 AWG.
A	FEMALE PUSH-ON, 1/4", 16-14 AWG.

APPROVED VENDOR: TORIK INC.



22054376 M

**HARNESS, WELDON  
FLASHER**

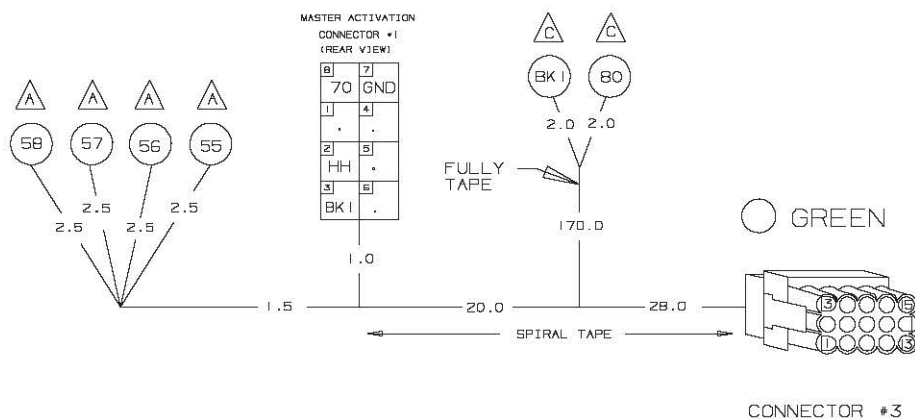
Option: B3580-03, 04, 05,  
06, 07, & 08-000



CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLING	99916716001	SWITCH CONNECTOR	1
	PED	12015869	18-20 GA TERMINAL	1
	PED	12015870	14-16 GA TERMINAL	3
	PED	12084590	10-12 GA TERMINAL	0
3	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	9
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	.
	AMP	770023-1	15 POSITION CONNECTOR, PLUG.	1
RELAY	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

5. STRIP INSULATION BACK 3/8" ON  
UNTERMINATED LEADS.  
4. REFER TO DWG. #52001136 FOR HARNESS  
SPECIFICATIONS.  
3. FULLY TAPE BREAKOUTS FOR 3"-  
2" SPACING OTHERWISE.  
2. TAG HARNESS FOR IDENTIFICATION.  
1. CIRCUIT NUMBERS TO BE STAMPED AT  
4" INTERVALS WITH THE PREFIX "B"  
NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
HH	16	RED	12V+ BAT. FROM FUSE PANEL.
BK1	16	BLACK	FROM SWITCH TO WELDON RELAY (+).
80	16	GREEN	ACTIVATION SW (AMBER) TO FLASHER.
GND	18	WHITE	CHASSIS GROUND.
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+)
55	18	YELLOW	WARNING LIGHT TO WELDON, AMBER.
56	18	RED	WARNING LIGHT TO WELDON, RED.
59	18	RED/BLACK	DOOR SIGNAL (GND).
81	18	BLUE/WHITE	TO WELDON, RED LIGHT ACTIVATION.
57	18	RED	WARNING LIGHT TO WELDON, RED.
58	18	YELLOW	WARNING LIGHT TO WELDON, AMBER.
.	.	.	.



1	2	3
55	56	57
4	5	6
58	70	80
7	8	9
.	.	HH
10	11	12
GND	.	.
13	14	15
.	BK1	.

OPTION: B3580-03-000  
(SRW, DRW MODELS ONLY)

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, 3/8" STUD, 14-16 GA.	2
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	4
	VENDOR	PART #	DESCRIPTION	QTY

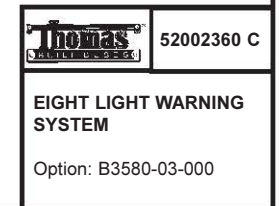
**52003619 B**

**HARNESS, EIGHT LIGHT  
WARNING SYSTEM**

Option: B3580-03-000  
End Date: 9/6/02

Diagram illustrating the components of the B3680-03-000 system:

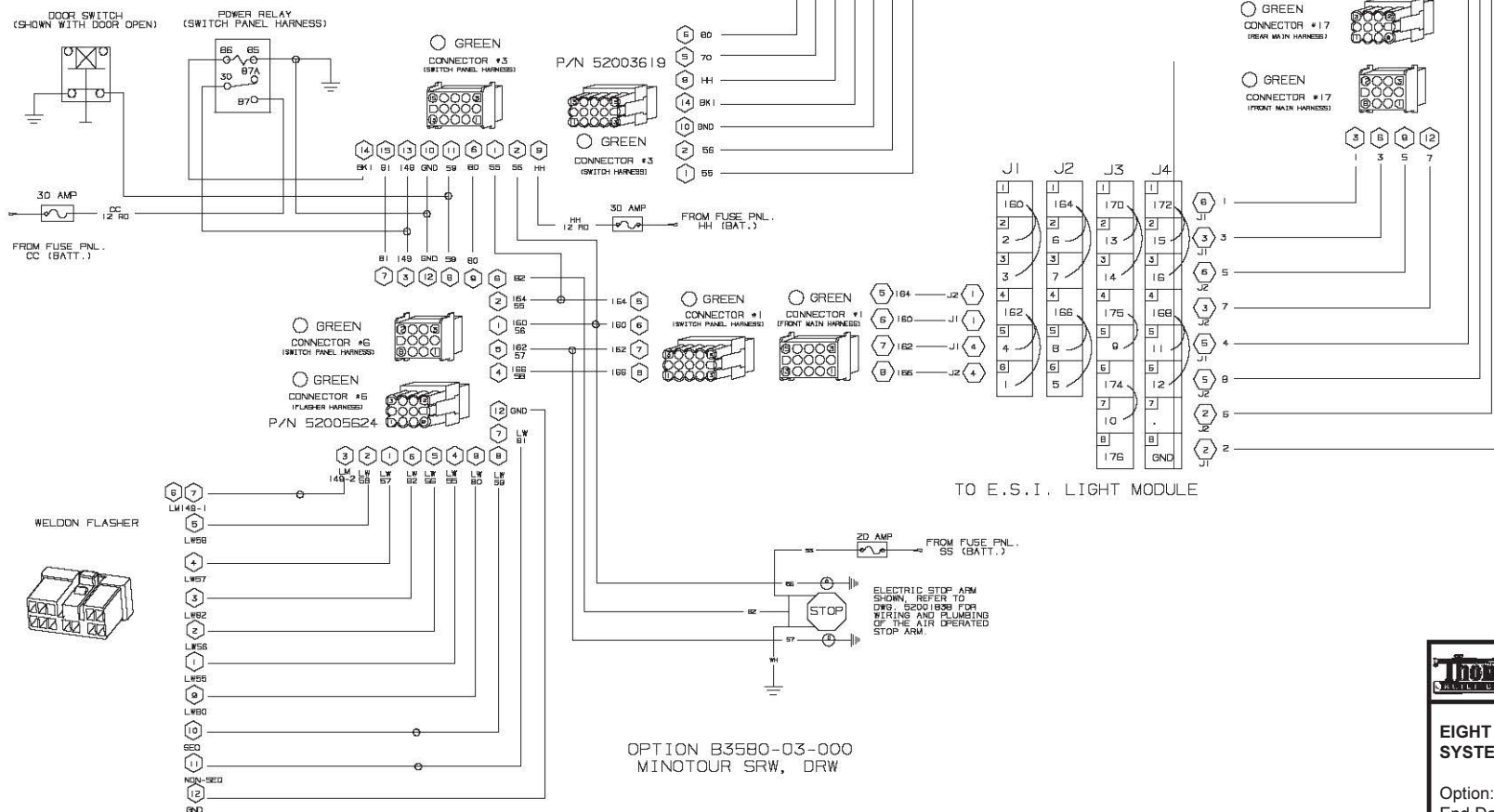
- WARNING LIGHTS** (Left)
- MASTER** (Center)
- FOOT SWITCH (FLOOR MTD)** (Right)





# B3580-03-000 SYSTEM OPERATION

1. FOUR 7" AMBER LIGHTS AND FOUR 7" RED LIGHTS.
2. AMBER LIGHTS MANUALLY ENERGIZED BY FOOT OPERATED SWITCH LOCATED IN DRIVER'S FOOTBOARD.
3. RED LIGHTS AUTOMATICALLY ENERGIZED (WITH AMBER LIGHTS DE-ENERGIZED) WHEN PAS SERVICE DOOR IS OPENED.
4. RED LIGHTS AND STOP ARM ACTIVATED WHENEVER SERVICE DOOR IS OPENED. (NON-SECURITY).
5. RED PILOT LIGHT IN SWITCH CABINET TO INDICATE SYSTEM OPERATION.
6. BELLINGHUE ELECTRICITY FLASHER.
7. MONTANA, MISSISSIPPI, OKLAHOMA SPECIFICATIONS.



OPTION B3580-03-000  
MINOTOUR SRW, DRW

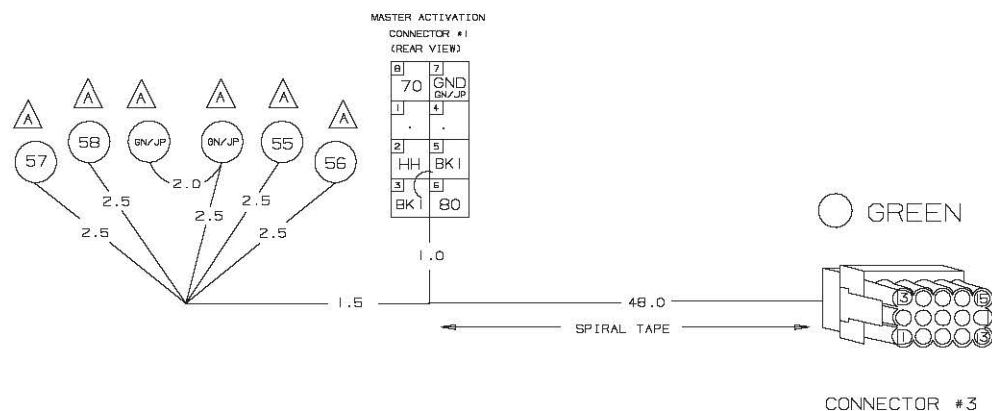
<b>Thomas</b> MILITARY EQUIPMENT	<b>52003633 D</b>
<b>EIGHT LIGHT WARNING SYSTEM</b>	
Option: B3580-03-000 End Date: 9/6/02	

CONN	VENDOR	PART *	DESCRIPTION	QTY
1	CARLING	99916716001	SWITCH CONNECTOR	1
	PED	12015959	18-20 GA TERMINAL	1
	PED	12015870	14-16 GA TERMINAL	5
	PED	12084590	10-12 GA TERMINAL	0
3	AMP	770005-3	14-20 GA. TERMINAL, RECEPTICAL.	9
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	.
	AMP	770023-1	15 POSITION CONNECTOR, PLUG.	1
RELAY	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

5. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.  
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.  
3. FULLY TAPE BREAKOUTS FOR 3"-2" SPACING OTHERWISE.  
2. TAG HARNESS FOR IDENTIFICATION.  
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"

NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
HH	16	RED	12V+ BAT. FROM FUSE PANEL.
BK1	16	BLACK	FROM SWITCH TO WELDON RELAY (+).
80	16	GREEN	ACTIVATION SW (AMBER) TO FLASHER.
GND	18	WHITE	CHASSIS GROUND.
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+)
55	18	YELLOW	WARNING LIGHT TO WELDON, AMBER.
56	18	RED	WARNING LIGHT TO WELDON, RED.
GN/JP	18	GREEN	GROUND, SWITCH LIGHT JUMPER. (-)
57	18	RED	WARNING LIGHT TO WELDON, RED.
58	18	YELLOW	WARNING LIGHT TO WELDON, AMBER.
.	.	.	.
.	.	.	.



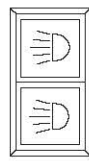
1	2	3
55	56	57
4	5	6
58	70	80
7	8	9
.	.	HH
10	11	12
GND	.	.
13	14	15
.	BK1	.

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	6
VENDOR	PART *	DESCRIPTION	QTY	

OPTION: B3580-04-000  
(SRW, DRW MODELS ONLY)

52003618 B

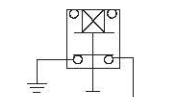
**HARNESS, EIGHT LIGHT WARNING SYSTEM**  
Option: B3580-04-000  
End Date: 9/6/02



# **B3580-04-000 SYSTEM OPERATION**

1. FOUR 7" AMBER LIGHTS AND FOUR 7" RED LIGHTS.
2. AMBER LIGHTS MANUALLY ENERGIZED BY TOCKER SWITCH LOCATED ON THE SWITCH PANEL.
3. RED LIGHTS AUTOMATICALLY ENERGIZED WITH AMBER LIGHTS DE-ENERGIZED.
4. WHEN BUS SERVICE DOOR IS OPENED.
5. RED LIGHTS AND STOP ARM ACTIVATED WHENEVER SERVICE DOOR IS OPENED.
6. (NON-IDENTICAL)
7. MASTER SWITCH IS LOCATED IN SWITCH PANEL.
8. YELLOW AND RED LIGHTS IN SWITCH PANEL TO INDICATE SYSTEM OPERATION.
9. YELLOW AND RED LIGHTS IN SWITCH PANEL TO INDICATE SYSTEM OPERATION.
10. ALASKA, KANSAS, MISSOURI, NEBRASKA, NEW YORK, TENNESSEE, VERMONT, AND WYOMING SPECIFICATIONS.

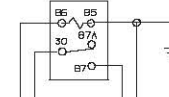
DOOR SWITCH  
(SHOWN WITH DOOR OPEN)



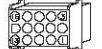
30 AMP

FROM FUSE PNL.  
CC (BATT.)

POWER RELAY  
(SWITCH PANEL HARNESS)



GREEN  
CONNECTOR #3  
(SWITCH PANEL HARNESS)



P/N 52003618

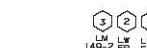
GREEN  
CONNECTOR #3  
(SWITCH HARNESS)



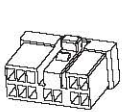
GREEN  
CONNECTOR #8  
(SWITCH PANEL HARNESS)



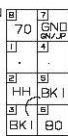
GREEN  
CONNECTOR #6  
(FLASHER HARNESS)



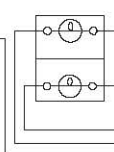
WELDON FLASHER



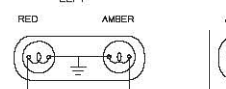
MASTER/ACTIVATION  
SWITCH  
CONNECTOR #1  
(REAR VIEW)



PILOT LIGHT



FRONT



REAR



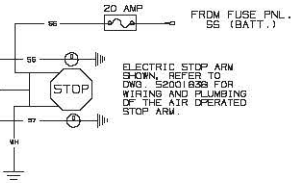
GREEN  
CONNECTOR #17  
(REAR MAIN HARNESS)



GREEN  
CONNECTOR #17  
(FRONT MAIN HARNESS)



TO E.S.I. LIGHT MODULE



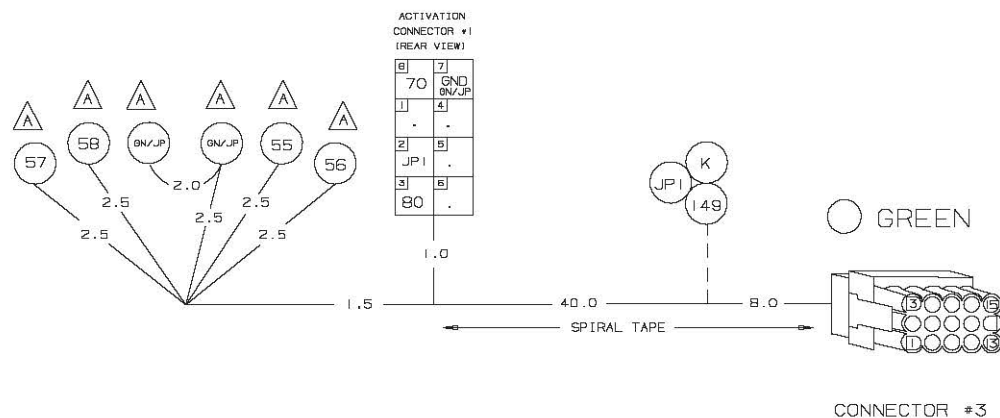
OPTION B3580-04-000  
MINOTOUR SRW, DRW

	<b>52003635 D</b>
<b>EIGHT LIGHT WARNING SYSTEM</b>	
Option: B3580-04-000 End Date: 9/6/02	

CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLING	99916716001	SWITCH CONNECTOR	1
		12015869	18-20 GA TERMINAL	2
	PED	12015870	14-16 GA TERMINAL	2
3	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	9
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	.
	AMP	770023-1	15 POSITION CONNECTOR, PLUG.	1
RELAY	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

5. STRIP INSULATION BACK 3/8" ON  
UNTERMINATED LEADS.  
4. REFER TO DWG. #52001136 FOR HARNESS  
SPECIFICATIONS.  
3. FULLY TAPE BREAKOUTS FOR 3"-  
2" SPACING OTHERWISE.  
2. TAG HARNESS FOR IDENTIFICATION.  
1. CIRCUIT NUMBERS TO BE STAMPED AT  
4" INTERVALS WITH THE PREFIX "B"  
NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
K	12	RED	12V+ (IGN.) FROM FUSE PANEL.
80	16	GREEN	ACTIVATION SW (AMBER) TO FLASHER.
GND	18	WHITE	CHASSIS GROUND.
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+)
55	18	YELLOW	WARNING LIGHT TO WELDON, AMBER.
56	18	RED	WARNING LIGHT TO WELDON, RED.
GN/JP	18	GREEN	GROUND, SWITCH LIGHT JUMPER, (-)
JP1	18	RED	JUMPER FROM HH TO SWITCH.
57	18	RED	WARNING LIGHT TO WELDON, RED.
58	18	YELLOW	WARNING LIGHT TO WELDON, AMBER.
149	12	BLACK	WELDON MASTER POWER (12V+).
.	.	.	.



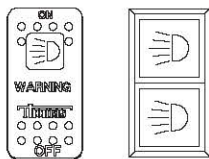
1	2	3
55	56	57
4	5	6
58	70	80
7	8	9
.	K	.
10	11	12
GND	.	.
13	14	15
149	.	.

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	6
	VENDOR	PART #	DESCRIPTION	QTY

OPTION: B3580-05-000  
(SRW, DRW MODELS ONLY)

<b>Thomas</b> SOLUTIONS	<b>52003603 B</b>
<b>HARNESS, EIGHT LIGHT WARNING SYSTEM</b>	
Option: B3580-05-000 End Date: 9/6/02	

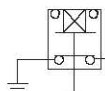




# B3580-05-000 SYSTEM OPERATION

1. FOUR 7" AMBER LIGHTS AND FOUR 7" RED LIGHTS.
2. AMBER LIGHTS MANUALLY ENERGIZED BY DOOR SWITCH LOCATED ON THE SWITCH PANEL.
3. RED LIGHTS AUTOMATICALLY ENERGIZED (WITH AMBER LIGHTS DE-ENERGIZED) WHEN BUS SERVICE DOOR IS OPENED.
4. RED LIGHTS AND STOP ARM ACTIVATED WHENEVER SERVICE DOOR IS OPENED. (NON-SEQUENTIAL)
5. RED AND AMBER LIGHT IN SWITCH CABINET TO INDICATE SYSTEM OPERATION.
6. WELDON 7000 ELECTRONIC FLASHER.

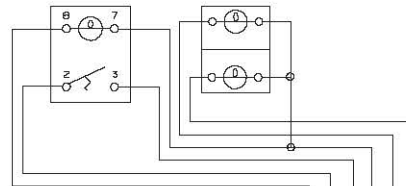
DOOR SWITCH  
(SHOWN WITH DOOR OPEN)



MOMENTARY ACTIVATION  
SWITCH  
CONNECTOR #1  
(REAR VIEW)



PILOT LIGHT



FRONT

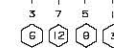


REAR



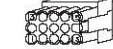
GREEN  
CONNECTOR #17  
(REAR MAIN HARNESS)

GREEN  
CONNECTOR #17  
(FRONT MAIN HARNESS)

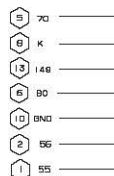


GREEN  
CONNECTOR #3  
(SWITCH PANEL HARNESS)

P/N 52003603



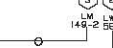
GREEN  
CONNECTOR #3  
(SWITCH HARNESS)



GREEN  
CONNECTOR #6  
(SWITCH PANEL HARNESS)

GREEN  
CONNECTOR #6  
(FLASHER HARNESS)

P/N 52005624



LM 148-1  
LM 148-2  
LM 148-3  
LM 148-4  
LM 148-5  
LM 148-6  
LM 148-7  
LM 148-8  
LM 148-9  
LM 148-10  
LM 148-11  
LM 148-12  
LM 148-13  
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LM 148-99  
LM 148-100

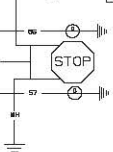
WELDON FLASHER



LM 148-1  
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LM 148-3  
LM 148-4  
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LM 148-96  
LM 148-97  
LM 148-98  
LM 148-99  
LM 148-100

TO E.S.I. LIGHT MODULE

FROM FUSE PNL.  
SS (BATT.)



ELECTRIC STOP ARM  
SHOWN. REFER TO  
DWG. 52001858 FOR  
WIRING AND PLUMBING  
OF THE AIR OPERATED  
STOP ARM.

OPTION B3580-05-000  
MINOTOUR SRW, DRW



EIGHT LIGHT WARNING  
SYSTEM

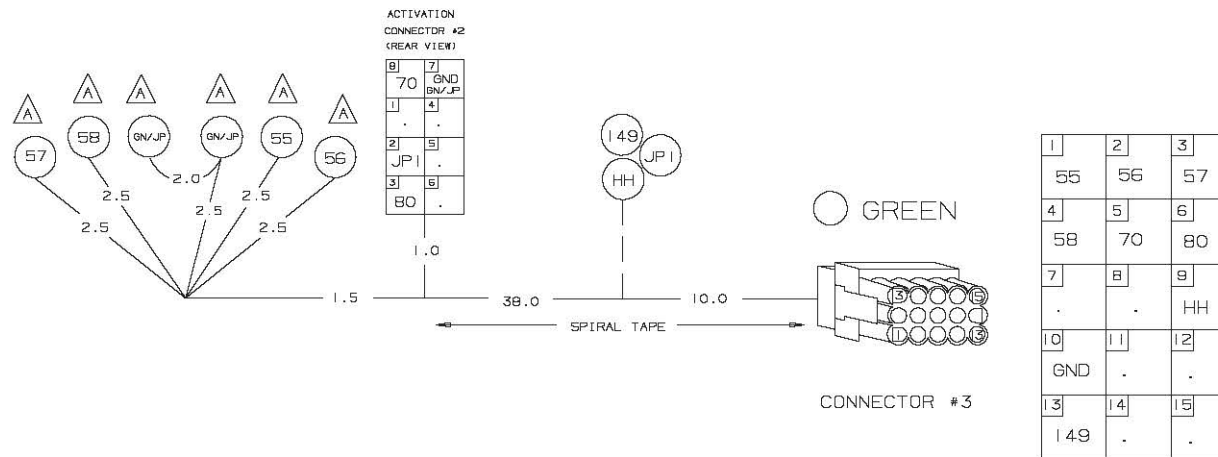
Option: B3580-05-000  
End Date: 9/16/02

CONN	VENDOR	PART #	DESCRIPTION	QTY
2	CARLING	98916716001	SWITCH CONNECTOR	1
	PED	12015860	18-20 GA TERMINAL	3
	PED	12015870	14-16 GA TERMINAL	2
	PED	12084590	10-12 GA TERMINAL	0
3	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	9
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	.
	AMP	770023-1	15 POSITION CONNECTOR, PLUG.	1
RELAY	HELLA	B7122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

5. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.  
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.  
3. FULLY TAPE BREAKOUTS FOR 3"-2" SPACING OTHERWISE.  
2. TAG HARNESS FOR IDENTIFICATION.  
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"

NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
HH	12	RED	12V+ BAT. FROM FUSE PANEL.
149	12	BLACK	FLASHER POWER.
80	16	GREEN	ACTIVATION SW (AMBER) TO FLASHER.
GND	18	WHITE	CHASSIS GROUND.
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+)
55	18	YELLOW	WARNING LIGHT TO WELDON, AMBER.
56	18	RED	WARNING LIGHT TO WELDON, RED.
57	18	RED	WARNING LIGHT TO WELDON, RED.
58	18	YELLOW	WARNING LIGHT TO WELDON, AMBER.
GN/JP	18	GREEN	GROUND, SWITCH LIGHT JUMPER. (-)
JP1	16	RED	SWITCH JUMPER (+)
.	.	.	.



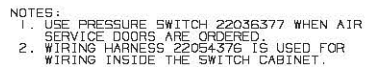
D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	6
	VENDOR	PART #	DESCRIPTION	QTY

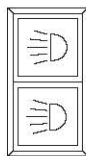
OPTION: B3580-06-000  
(SRW, DRW MODELS ONLY)

	52003604 B
<b>HARNESS, EIGHT LIGHT WARNING SYSTEM</b>	
Option: B3580-06-000 Effective Date: 9/6/02	

PILOT  
52002241

1. FOUR 7" AMBER LIGHTS AND FOUR 7" RED LIGHTS.
2. AMBER LIGHTS MANUALLY ENERGIZED BY ROCKER SWITCH LOCATED ON THE SWITCH PANEL.
3. RED LIGHTS AUTOMATICALLY ENERGIZED (WITH AMBER LIGHTS AUTOMATICALLY DE-ENERGIZED) WHEN BUS SERVICE DOOR IS OPENED.
4. RED LIGHTS AND STOP ARM ONLY ACTIVATED AFTER AMBER LIGHTS.
5. RED ALERT LIGHT IN SWITCH CABINET TO INDICATE SYSTEM OPERATION.
6. WELDON 7000 ELECTRONIC FLASHER.

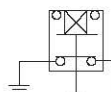




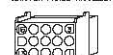
# **B3580-06-000** **SYSTEM OPERATION**

1. FOUR 7" AMBER LIGHTS AND FOUR 7" RED LIGHTS.
2. AMBER LIGHTS MANUALLY ENERGIZED BY ROCKER SWITCH LOCATED ON THE SWITCH PANEL.
3. RED LIGHTS AUTOMATICALLY ENERGIZED (WITH AMBER LIGHTS DE-ENERGIZED) WHEN BUS SERVICE DOOR IS OPENED.
4. RED LIGHTS AND STOP ARM ACTIVATED ONLY AFTER AMBER LIGHTS.
5. MASTER SWITCH IS LOCATED IN SWITCH PANEL.
6. YELLOW 7000 ELECTRONIC FLASHER (HARNESSES) TO INDICATE SYSTEM OPERATION.
7. COLORADO, SEBRITA, AND IDAHO SPECIFICATIONS.

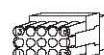
DOOR SWITCH  
(SHOWN WITH DOOR OPEN)



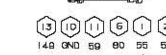
GREEN  
CONNECTOR #3  
(SWITCH PANEL HARNESS)



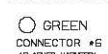
P/N 52003604



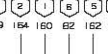
GREEN  
CONNECTOR #3  
(SWITCH PANEL HARNESS)



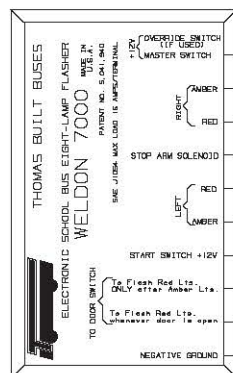
GREEN  
CONNECTOR #6  
(SWITCH PANEL HARNESS)



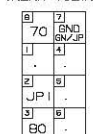
GREEN  
CONNECTOR #6  
(FLASHER HARNESS)



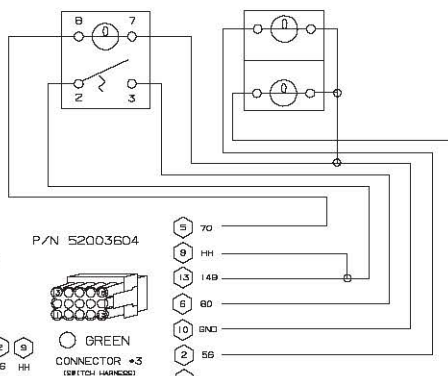
WELDON FLASHER



ACTIVATION  
SWITCH  
CONNECTOR #1  
(REAR VIEW)



PILOT LIGHT



GREEN  
CONNECTOR #3  
(SWITCH PANEL HARNESS)



GREEN  
CONNECTOR #3  
(SWITCH PANEL HARNESS)



GREEN  
CONNECTOR #3  
(SWITCH PANEL HARNESS)



GREEN  
CONNECTOR #3  
(SWITCH PANEL HARNESS)



GREEN  
CONNECTOR #3  
(SWITCH PANEL HARNESS)



GREEN  
CONNECTOR #3  
(SWITCH PANEL HARNESS)



GREEN  
CONNECTOR #3  
(SWITCH PANEL HARNESS)

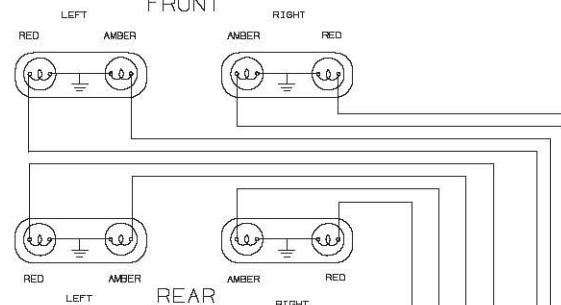


GREEN  
CONNECTOR #3  
(SWITCH PANEL HARNESS)



OPTION B3580-06-000  
MINOTOUR SRW, DRW

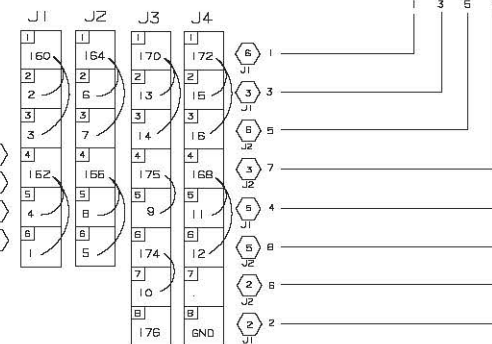
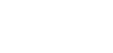
FRONT



GREEN  
CONNECTOR #17  
(REAR MAIN HARNESS)

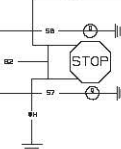


GREEN  
CONNECTOR #17  
(FRONT MAIN HARNESS)



TO E.S.I. LIGHT MODULE

20 AMP  
FROM FUSE PNL.  
SS (BATT.)



ELECTRIC STOP ARM  
SHOWN. REFER TO  
DING 52001638 FOR  
WIRING AND PLUMBING  
OF THE AIR OPERATED  
STOP ARM.



**EIGHT LIGHT WARNING  
SYSTEM**

Option: B3580-06-000

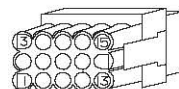
CONN	VENDOR	PART #	DESCRIPTION	QTY
1, 2	CARLING	99916716001	SWITCH CONNECTOR	1
	PED	12015868	18-20 GA TERMINAL	2
	PED	12015870	14-16 GA TERMINAL	6
	PED	12084590	10-12 GA TERMINAL	0
3	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	6
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	0
	AMP	770023-1	15 POSITION CONNECTOR, PLUG.	1
RELAY	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

5. STRIP INSULATION BACK 3/8" ON  
UNTERMINATED LEADS.  
4. REFER TO DWG. #52001136 FOR HARNESS  
SPECIFICATIONS  
3. FULLY TAPE BREAKOUTS FOR 3"-  
2" SPACING OTHERWISE.  
2. TAG HARNESS FOR IDENTIFICATION.  
1. CIRCUIT NUMBERS TO BE STAMPED AT  
4" INTERVALS WITH THE PREFIX "B"  
NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
K	16	RED	12V+ (IGN.) FROM FUSE PANEL.
80	16	GREEN	ACTIVATION SW (AMBER) TO FLASHER.
GND	18	WHITE	CHASSIS GROUND.
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+)
GN/JP	18	GREEN	GROUND, SWITCH LIGHT JUMPER (-).
PLT	18	RED	PILOT LIGHT FEED FROM CUR. SENSOR
BK1	16	BLACK	TO FLASHER RELAY, TRIGGER (12V+)
.	.	.	.
.	.	.	.

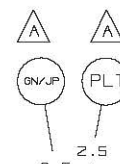
1	2	3
.	.	.
4	5	6
.	70	80
7	8	9
PLT	K	.
10	11	12
GND	.	.
13	14	15
.	BK1	.

GREEN  
CONNECTOR #3  
(TO SWITCH CABINET HARNESS)

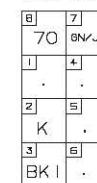


CONNECTOR #3

MOMENTARY ACTIVATION  
CONNECTOR #2  
(REAR VIEW)



MASTER ACTIVATION  
CONNECTOR #1  
(REAR VIEW)



OPTION: B3580-07-000  
(SRW, DRW MODELS ONLY)

E	.	.	MALE BLADE, 3/16" 14-16 GA.	.
D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	2
VENDOR		PART #	DESCRIPTION	QTY

52003553 C

**HARNESS, EIGHT LIGHT  
WARNING SYSTEM**  
  
Option: B3580-07-000  
End Date: 9/6/02

TERM.	DESCRIPTION
A	FEMALE PUSH-ON, 1/4", 10-12 AWG.
B	FEMALE PUSH-ON, 1/4", 14-16 AWG.
C	OPEN END SPADE FOR #10 STUD, 14-16 AWG.
D	OPEN END SPADE FOR #10 STUD, 10-12 AWG.

CIR.	GA.	COLOR	DESCRIPTION
55	16	YELLOW	WARNING LIGHT PILOT LIGHT (AMBER)
56	16	RED	WARNING LIGHT PILOT LIGHT (RED)
57	16	RED	WARNING LIGHT PILOT LIGHT (RED)
58	16	YELLOW	WARNING LIGHT PILOT LIGHT (AMBER)
84	12	WHITE	MASTER SWITCH TO FUSE PANEL
78	12	BLACK	MASTER SWITCH TO COIL OF CURRENT SENSING RELAY
79	12	BLACK	MASTER SWITCH TO START SWITCH
80	14	GREEN	START SWITCH TO START SWITCH (+12V) TERMINAL ON FLASHER
481	16	BLACK	PANEL LIGHTS FEED
482	16	GREEN	PANEL LIGHTS GROUND



APPROVED VENDORS: TORIK INC.  
TECHNICAL COMPONENTS  
LONDON HARNES

6. FULLY TAPE HARNESS.
5. THIS HARNESS IS USED FOR VISTA WARNING LIGHT OPTIONS: B3580-02, 03, 05, 06, 07, 08, 10, 16, 17 AND 23.
4. FOR OPTION B-3720-02-000 OR OPTION B3720-03-000 (BADER BROWN FLASHER), REPLACE FEMALE TERMINAL WITH PACKARD "56" SERIES LONG MALE BLADE.
3. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
2. TAG HARNESS FOR IDENTIFICATION.
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS W/PREFIX "B" ON ALL LEADS.

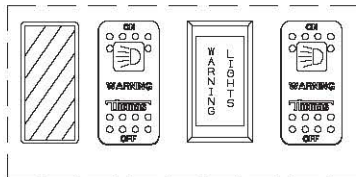
NOTES:

52000176 J

**HARNESS, WELDON  
FLASHER**

Option: B3580-07-000



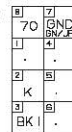


SWITCHES MOUNTED IN CONTROL BOX LOCATED ON TOP OF MANUAL DOOR CONTROL MECHANISM.

#### B3580-07-000 SYSTEM OPERATION

1. FOUR 7" AMBER LIGHTS AND FOUR 7" RED LIGHTS.
2. AMBER LIGHTS MANUALLY ENERGIZED BY PULLING SWITCH LOCATED IN CONTROL BOX.
3. RED LIGHTS AUTOMATICALLY ENERGIZED WITH AMBER LIGHTS AUTOMATICALLY DE-ENERGIZED WHEN BUS SERVICE DOOR IS OPENED.
4. RED LIGHTS AND STOP ARM ACTIVATED WHENEVER SERVICE DOOR IS OPENED (NON-EMERGENCY).
5. RED PILOT LIGHT LOCATED IN CONTROL BOX TO RIGHT OF STEERING WHEEL.
6. WELDON 7000 ELECTRONIC FLASHER.
7. MINNESOTA SPECIFICATION.

MASTER/ACTIVATION  
SWITCH  
CONNECTOR #1  
(REAR VIEW)

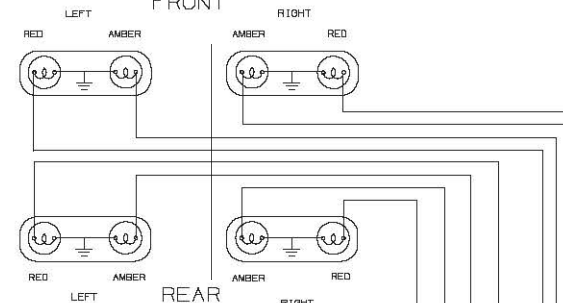


PILOT LIGHT

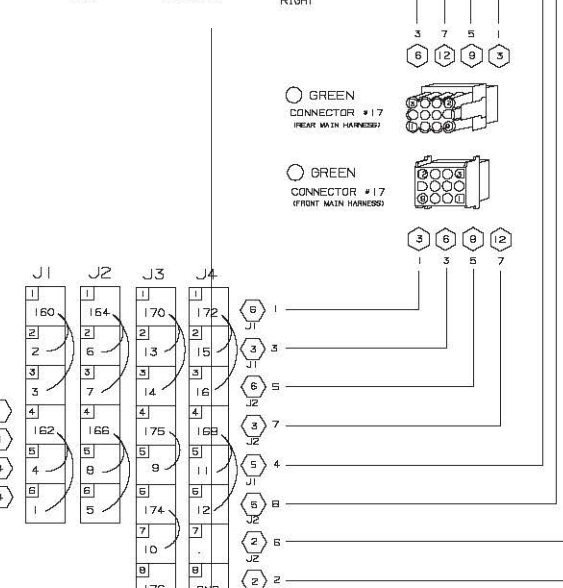


ACTIVATION  
SWITCH  
CONNECTOR #2  
(REAR VIEW)

FRONT



REAR



DOOR SWITCH  
(SHOWN WITH DOOR OPEN)

POWER RELAY  
(SWITCH PANEL HARNESS)

P/N 52003553

CONNECTOR #3  
(SWITCH HARNESS)

CONNECTOR #3  
(SWITCH HARNESS)

CONNECTOR #3  
(SWITCH HARNESS)

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(SWITCH HARNESS)

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(SWITCH HARNESS)

CONNECTOR #3  
(SWITCH HARNESS)

CONNECTOR #3  
(SWITCH HARNESS)

FROM FUSE PNL.  
CC (BATT.)

CURRENT SENSOR  
52001651

CONNECTOR #6  
(SWITCH PANEL HARNESS)

CONNECTOR #6  
(SWITCH PANEL HARNESS)

CONNECTOR #6  
(SWITCH PANEL HARNESS)

CONNECTOR #6  
(SWITCH PANEL HARNESS)

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CONNECTOR #6  
(SWITCH PANEL HARNESS)

CONNECTOR #6  
(SWITCH PANEL HARNESS)

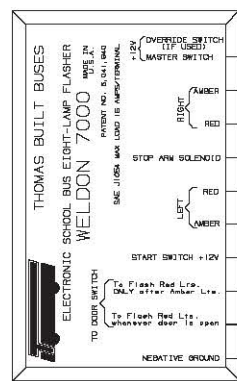
CONNECTOR #6  
(SWITCH PANEL HARNESS)

CONNECTOR #6  
(SWITCH PANEL HARNESS)

CONNECTOR #6  
(SWITCH PANEL HARNESS)

CONNECTOR #6  
(SWITCH PANEL HARNESS)

WELDON FLASHER



OPTION B3580-07-000  
MINOTOUR SRW, DRW

20 AMP  
FROM FUSE PNL.  
SS (BATT.)

20 AMP  
FROM FUSE PNL.  
SS (BATT.)

20 AMP  
FROM FUSE PNL.  
SS (BATT.)

20 AMP  
FROM FUSE PNL.  
SS (BATT.)

20 AMP  
FROM FUSE PNL.  
SS (BATT.)

20 AMP  
FROM FUSE PNL.  
SS (BATT.)

20 AMP  
FROM FUSE PNL.  
SS (BATT.)

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FROM FUSE PNL.  
SS (BATT.)

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FROM FUSE PNL.  
SS (BATT.)

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FROM FUSE PNL.  
SS (BATT.)

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FROM FUSE PNL.  
SS (BATT.)

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FROM FUSE PNL.  
SS (BATT.)

20 AMP  
FROM FUSE PNL.  
SS (BATT.)

20 AMP  
FROM FUSE PNL.  
SS (BATT.)

20 AMP  
FROM FUSE PNL.  
SS (BATT.)

20 AMP  
FROM FUSE PNL.  
SS (BATT.)

20 AMP  
FROM FUSE PNL.  
SS (BATT.)

20 AMP  
FROM FUSE PNL.  
SS (BATT.)

52003554 E

**EIGHT LIGHT WARNING  
SYSTEM**

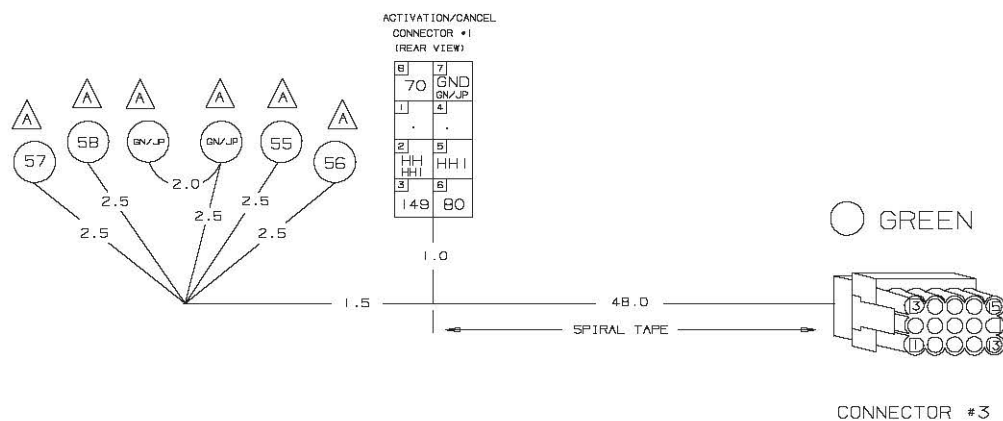
Option: B3580-07-000  
End Date: 9/6/02

CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLING	99916716001	SWITCH CONNECTOR	1
	PED	12015869	18-20 GA TERMINAL	1
	PED	12015870	14-16 GA TERMINAL	3
	PED	12084580	10-12 GA TERMINAL	2
3	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	9
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	.
	AMP	770023-1	15 POSITION CONNECTOR, PLUG.	1
RELAY	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

5. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.  
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.  
3. FULLY TAPE BREAKOUTS FOR 3"-2" SPACING OTHERWISE.  
2. TAG HARNESS FOR IDENTIFICATION.  
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"

NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
149	12	BLACK	WELDON MASTER POWER. (+)
80	16	GREEN	ACTIVATION SW (AMBER) TO FLASHER.
GND	18	WHITE	CHASSIS GROUND.
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+)
55	18	YELLOW	WARNING LIGHT TO WELDON, AMBER.
56	18	RED	WARNING LIGHT TO WELDON, RED.
HHI	16	RED	SWITCH JUMPER
GN/JP	18	GREEN	GROUND, SWITCH LIGHT JUMPER. (-)
HH	12	RED	12 V+ (BAT.) FROM FUSE PANEL.
57	18	RED	WARNING LIGHT TO WELDON, RED.
58	18	YELLOW	WARNING LIGHT TO WELDON, AMBER.
.	.	.	.



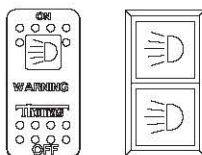
1	2	3
55	56	57
4	5	6
58	70	80
7	8	9
.	.	HH
10	11	12
GND	.	.
13	14	15
149	.	.

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	6
VENDOR	PART #	DESCRIPTION	QTY	

OPTION: B3580-08-000  
(SRW, DRW MODELS ONLY)

52003606 B

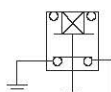
**HARNESS, EIGHT LIGHT WARNING SYSTEM**  
Option: B3580-08-000  
End Date: 9/6/02



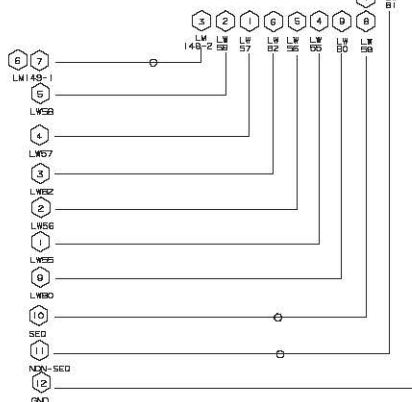
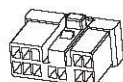
# B3580-08-000 SYSTEM OPERATION

1. FOUR 7" AMBER LIGHTS AND FOUR 7" RED LIGHTS.
2. AMBER LIGHTS MANUALLY ENERGIZED BY ROCKER SWITCH LOCATED ON THE SWITCH PANEL.
3. RED LIGHTS AUTOMATICALLY ENERGIZED (WITH AMBER LIGHTS DE-ENERGIZED).
4. AMBER LIGHTS CAN ALSO BE DEACTIVATED BY ROCKER SWITCH LOCATED ON THE SWITCH PANEL.
5. RED LIGHTS AND STOP ARM ACTIVATED ONLY AFTER AMBER LIGHTS, RED AND AMBER LIGHT TO SWITCH COMBINE TO INDICATE SYSTEM OPERATION.
6. WELDON 2000 ELECTRONIC FLASHER.

DOOR SWITCH  
(SHOWN WITH DOOR OPEN)



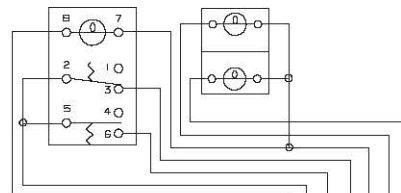
WELDON FLASHER



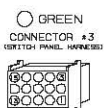
ACTIVATION/CANCEL  
SWITCH  
CONNECTOR #1  
(REAR VIEW)



PILOT LIGHT



P/N 52003606

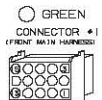
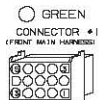


FROM FUSE PNL.  
HH (BATT.)

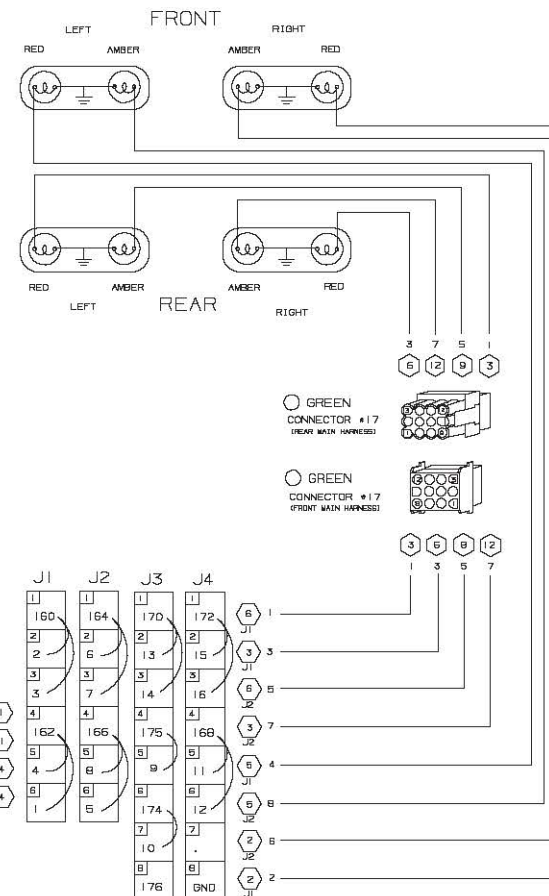


P/N 52005624

FROM FUSE PNL.  
HH (BATT.)



TO E.S.I. LIGHT MODULE



OPTION B3580-08-000  
MINOTOUR SRW, DRW

	52003643 D
<b>EIGHT LIGHT WARNING SYSTEM</b>	
Option: B3580-08-000 End Date: 9/6/02	

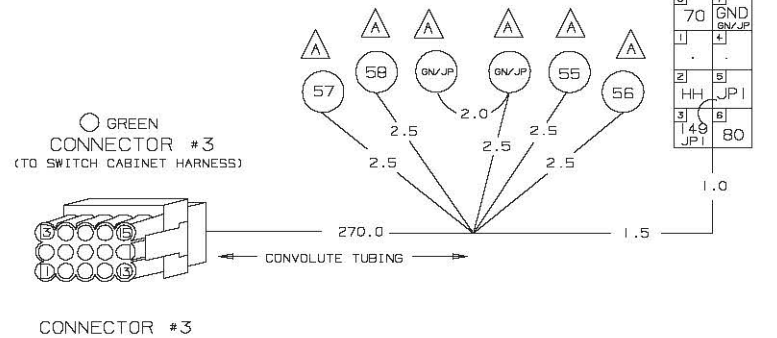
CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLING	99916715001	SWITCH CONNECTOR	1
	PED	12015869	18-20 GA TERMINAL	1
	PED	12015870	14-16 GA TERMINAL	3
	PED	12084590	10-12 GA TERMINAL	2
3	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	9
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	2
	AMP	770023-1	15 POSITION CONNECTOR, PLUG.	1
RELAY	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

5. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.  
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.  
3. FULLY TAPE BREAKOUTS FOR 3"-2" SPACING OTHERWISE.  
2. TAG HARNESS FOR IDENTIFICATION.  
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"

NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
HH	12	RED	12V+ BAT. FROM FUSE PANEL.
JPI	16	RED	SWITCH JUMPER. (+)
80	16	GREEN	ACTIVATION SW (AMBER) TO FLASHER.
GND	18	WHITE	CHASSIS GROUND.
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+)
55	18	YELLOW	WARNING LIGHT TO WELDON, AMBER.
56	18	RED	WARNING LIGHT TO WELDON, RED.
GN/JP	18	GREEN	GROUND, SWITCH LIGHT JUMPER. (-)
149	12	BLACK	WELDON MASTER POWER. (+)
57	18	RED	WARNING LIGHT TO WELDON, RED.
58	18	YELLOW	WARNING LIGHT TO WELDON, AMBER.
.	.	.	.

1	2	3
55	56	57
4	5	6
58	70	80
7	8	9
.	.	HH
10	11	12
GND	.	.
13	14	15
149	.	.



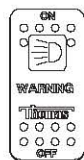
D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	6
VENDOR	PART #	DESCRIPTION	QTY	

OPTION: B3580-11-000  
(SRW, DRW MODELS ONLY)

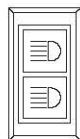
52003602 B

**HARNESS, EIGHT LIGHT WARNING SYSTEM**  
Option: B3580-11-000  
End Date: 7/9/02

## SWITCH LAYOUT



ACTIVATION  
/CANCEL  
52002623



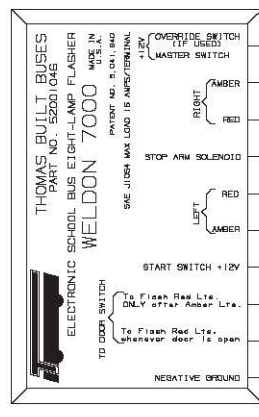
PILOT  
52002241

### SWITCH BOX REQUIRED (CONV.)

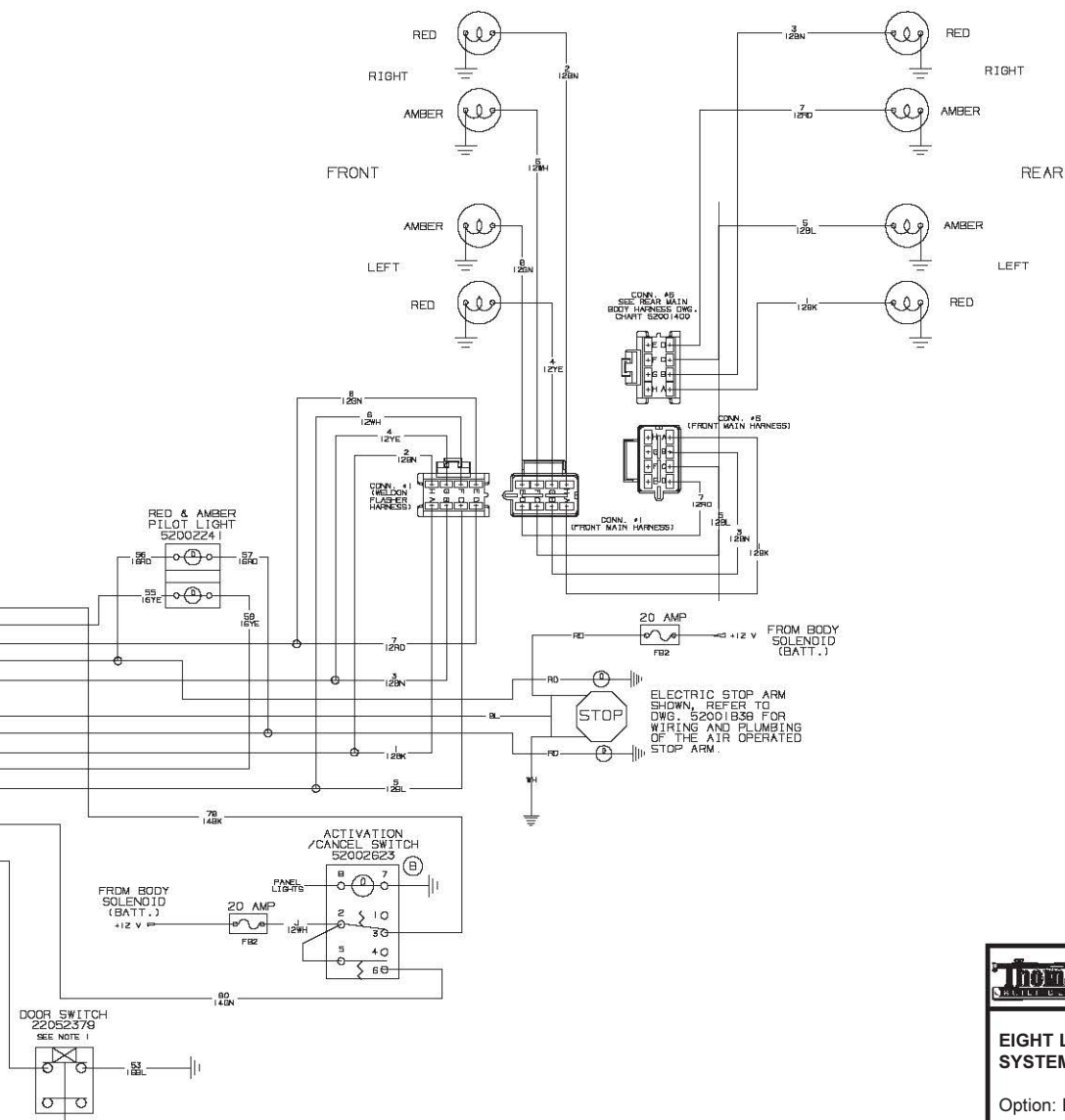
	DOOR		
	MANUAL	AIR	ELECTRIC
CONV.	52002144	52002145	52002145
VISTA	SW. CABINET	SW. CABINET	SW. CABINET
PUSH	SW. CABINET	SW. CABINET	SW. CABINET
F.C.	SW. CABINET	SW. CABINET	SW. CABINET

### B3580-11-000 SYSTEM OPERATION

1. FOUR 7" AMBER LIGHTS AND FOUR 7" RED LIGHTS.
2. AMBER LIGHTS MANUALLY ENERGIZED BY ROCKER SWITCH LOCATED ON THE SWITCH PANEL OR CONTROL BOX LEFT OF STEERING COLUMN.
3. RED LIGHTS AUTOMATICALLY ENERGIZED (WITH AMBER LIGHTS AUTOMATICALLY DE-ENERGIZED) WHEN BUS SERVICE DOOR IS OPENED.
4. AMBER LIGHTS CAN ALSO BE DEACTIVATED BY ROCKER SWITCH LOCATED ON THE SWITCH PANEL OR CONTROL BOX.
5. RED LIGHTS AND STOP ARM ONLY ACTIVATED AFTER AMBER LIGHTS.
6. RED AND AMBER PILOT LIGHT IN SWITCH CABINET OR CONTROL BOX TO INDICATE SYSTEM OPERATION.
7. WELDON 7000 ELECTRONIC FLASHER.



- NOTES:
1. USE PRESSURE SWITCH 22036377 WHEN AIR SERVICE DOORS ARE ORDERED.
  2. WIRING HARNESS 22054375 IS USED FOR WIRING INSIDE THE SWITCH CABINET ON THE VISTA, ER, AND FC.
  3. WIRING HARNESS 52000176 IS USED FOR WIRING THE SWITCH BOX ON THE CONV..

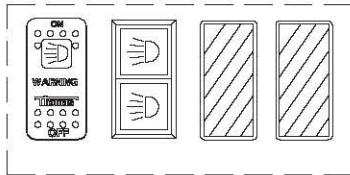


52002498 C

### EIGHT LIGHT WARNING SYSTEM

Option: B3580-11-000



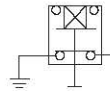


SWITCHES MOUNTED IN CONTROL BOX LOCATED ON TOP OF MANUAL DOOR CONTROL MECHANISM.

#### B3580-11-000 SYSTEM OPERATION

1. FOUR 7" AMBER LIGHTS AND FOUR 7" RED LIGHTS.
2. AMBER LIGHTS MANUALLY ENERGIZED BY ROCKER SWITCH LOCATED ON THE SWITCH PANEL AS SHOWN (SEE LEFT OF WIRING COLUMN).
3. RED LIGHTS AUTOMATICALLY ENERGIZED WITH AMBER LIGHTS DE-ENERGIZED.
4. WHEN DOOR SHUT (DOOR IS CLOSED), AMBER LIGHTS CAN ALSO BE DEACTIVATED BY ROCKER SWITCH LOCATED ON THE SWITCH PANEL.
5. RED LIGHTS AND STOP ARM ACTIVATED ONLY AFTER AMBER LIGHTS.
6. RED AND AMBER LIGHT ON SWITCH CABINET TO INDICATE SYSTEM OPERATION.
7. WELDON 2000 ELECTRONIC FLASHER.
8. DWA, NORTH DAKOTA, NEVADA SPECIFICATIONS.

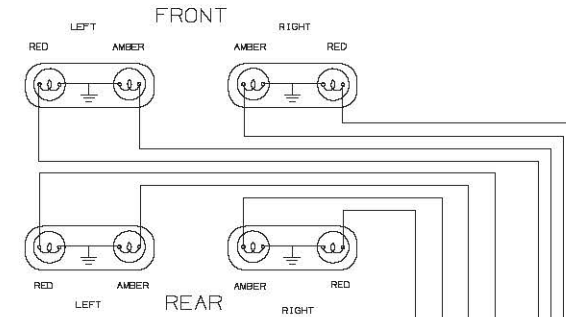
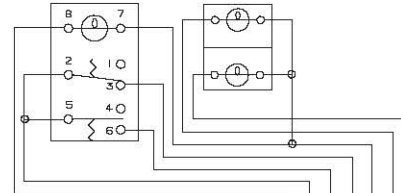
DOOR SWITCH  
(SHOWN WITH DOOR OPEN)



ACTIVATION/CANCEL  
SWITCH  
CONNECTOR #1  
(REAR VIEW)

9	7
70	GND
1	4
.	.
2	5
HH	JP1
3	6
149	80
JP1	

PILOT LIGHT



GREEN  
CONNECTOR #17  
(REAR MAIN HARNESS)

GREEN  
CONNECTOR #17  
(FRONT MAIN HARNESS)

3 7 5 1  
6 12 9 3

3 6 8 12  
1 5 5 7

GREEN  
CONNECTOR #3  
(SWITCH PANEL HARNESS)

P/N 52003602



GREEN  
CONNECTOR #3  
(SWITCH HARNESS)

91 149 GND 58 50 55 56 HH

7 3 12 8 6

GREEN  
CONNECTOR #6  
(SWITCH PANEL HARNESS)

154 55 160 56 162 57 166 58

2 1 5 4

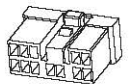
GREEN  
CONNECTOR #6  
(FLASHER HARNESS)

P/N 52005624

149 2 LW 57 LW 58 LW 59 LW 60 LW 61

3 2 1 6 5 4 8

WELDON FLASHER



LM148-1

LW58

LW57

LW52

LW56

LW55

LW50

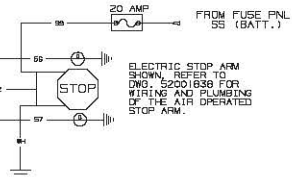
SED

NON-SED

GND

OPTION B3580-11-000  
MINOTOUR SRW, DRW

TO E.S.I. LIGHT MODULE



ELECTRIC STOP ARM  
SHOWN, REFER TO  
DWG. 52001638 FOR  
WIRING AND PLUMBING  
OF THE AIR OPERATED  
STOP ARM.

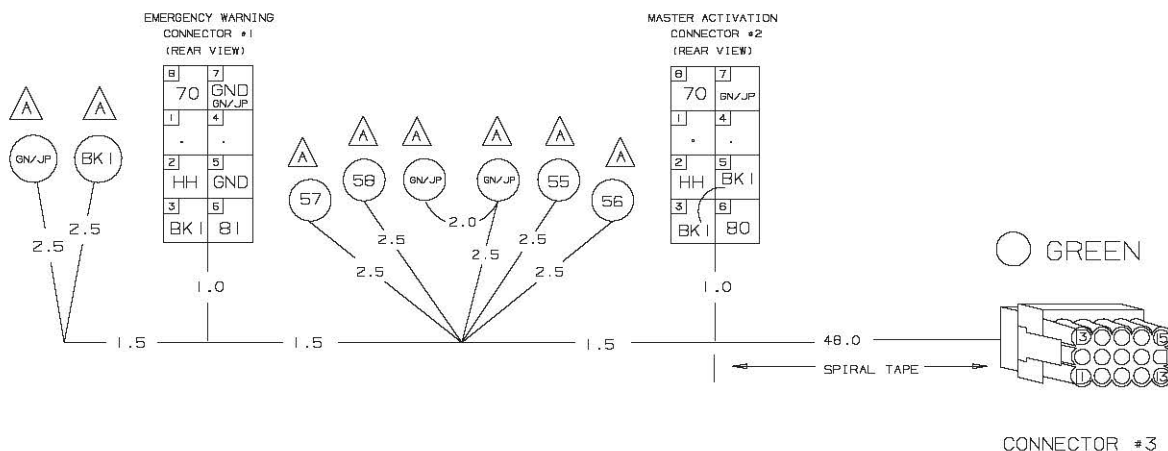
	52003644 D
<b>EIGHT LIGHT WARNING SYSTEM</b>	
Option: B3580-11-000 End Date: 9/5/02	



CONN	VENDOR	PART #	DESCRIPTION	QTY
1, 2	CARLING	99916716001	SWITCH CONNECTOR	2
	PED	12015869	18-20 GA TERMINAL	4
	PED	12015870	14-16 GA TERMINAL	8
	PED	12084590	10-12 GA TERMINAL	0
3	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	10
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	.
	AMP	770023-1	15 POSITION CONNECTOR, PLUG.	1
RELAY	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

5. STRIP INSULATION BACK 3/8" ON  
UNTERMINATED LEADS.  
4. REFER TO DWG. #52001136 FOR HARNESS  
SPECIFICATIONS.  
3. FULLY TAPE BREAKOUTS FOR 3"-  
2" SPACING OTHERWISE.  
2. TAG HARNESS FOR IDENTIFICATION.  
1. CIRCUIT NUMBERS TO BE STAMPED AT  
4" INTERVALS WITH THE PREFIX "B"  
NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
HH	16	RED	12V+ BAT. FROM FUSE PANEL.
BK1	18	BLACK	FROM SWITCH TO WELDON RELAY (+).
80	16	GREEN	ACTIVATION SW (AMBER) TO FLASHER.
GND	16	WHITE	CHASSIS GROUND.
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+).
GN/JP	18	GREEN	GROUND, SWITCH LIGHT JUMPER (-).
55	18	YELLOW	WARNING LIGHT TO WELDON, AMBER.
56	18	RED	WARNING LIGHT TO WELDON, RED.
57	18	RED	WARNING LIGHT TO WELDON, RED.
58	18	YELLOW	WARNING LIGHT TO WELDON, AMBER.
81	18	BLUE/WHITE	TO WELDON, RED LIGHT ACTIVATE.
.	.	.	.



1	2	3
55	56	57
4	5	6
58	70	80
7	8	9
.	.	HH
10	11	12
GND	.	.
13	14	15
.	BK1	81

OPTION: B3580-13-000  
(SRW, DRW MODELS ONLY)

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	8
	VENDOR	PART #	DESCRIPTION	QTY

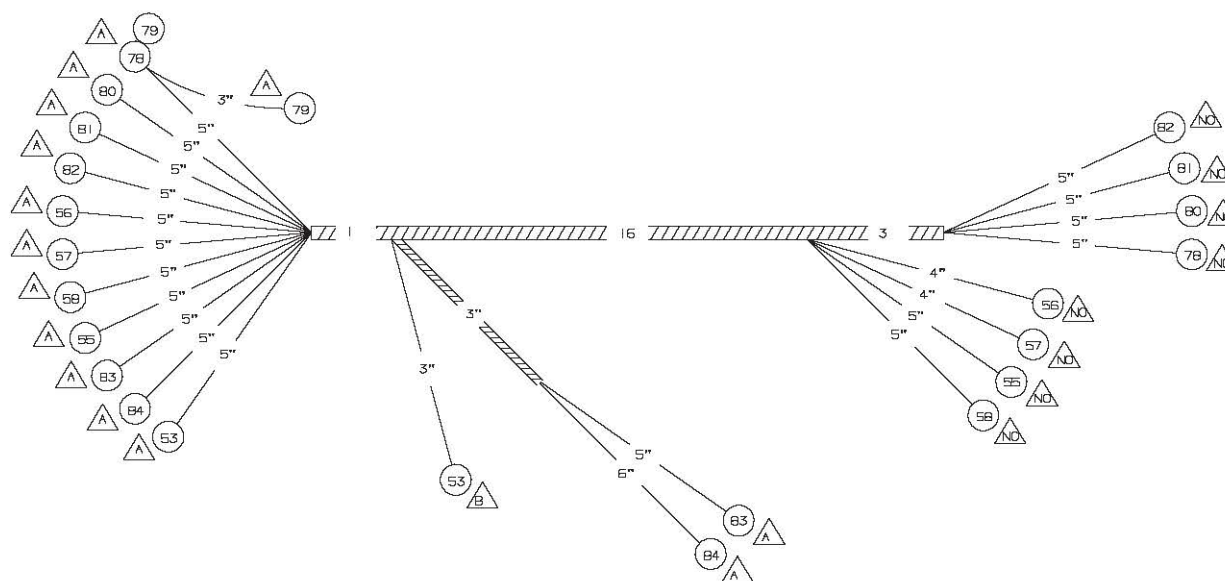
**52003587 B**

**HARNESS, EIGHT LIGHT  
WARNING SYSTEM**

Option: B3580-13-000  
 End Date: 9/5/02

TERM.	DESCRIPTION
A	FEMALE PUSH-ON, 1/4", 14-16 AWG.
B	RING TERMINAL, #10 STUD, 14-16 AWG


CIR.	GA.	COLOR	DESCRIPTION
78	14	BLACK	SWITCH TO #9 TERMINAL ON FLASHER
79	14	BLACK	SWITCH TO SWITCH
80	14	GREEN	SWITCH TO #11 TERMINAL ON FLASHER
81	14	BLUE	SWITCH TO #8 TERMINAL ON FLASHER
82	14	BROWN/WHIT.	SWITCH TO #3 TERMINAL ON FLASHER
56	16	RED	PILOT
57	16	RED	PILOT
55	16	YELLOW	PILOT
58	16	YELLOW	PILOT
83	14	BROWN/WHIT.	SWITCH TO CIRCUIT BREAKER
84	14	WHITE	SWITCH TO CIRCUIT BREAKER
53	14	RED/BLACK	GROUND



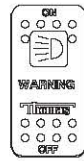
APPROVED VENDORS: TORIK INC.

4. FULLY TAPE HARNESS  
 3. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.  
 2. TAG HARNESS FOR IDENTIFICATION.  
 1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS W/PREFIX "B" ON ALL LEADS.

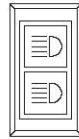
NOTES:

	52000313 E
HARNESS FOR 358-13	

## SWITCH LAYOUT



OVERRIDE  
52003024



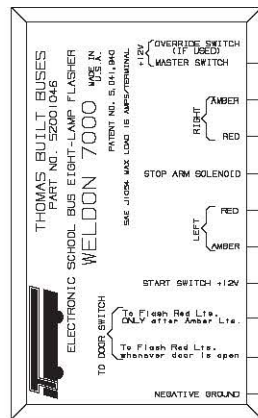
PILOT  
52002241



MASTER/  
ACTIVATION  
52004164

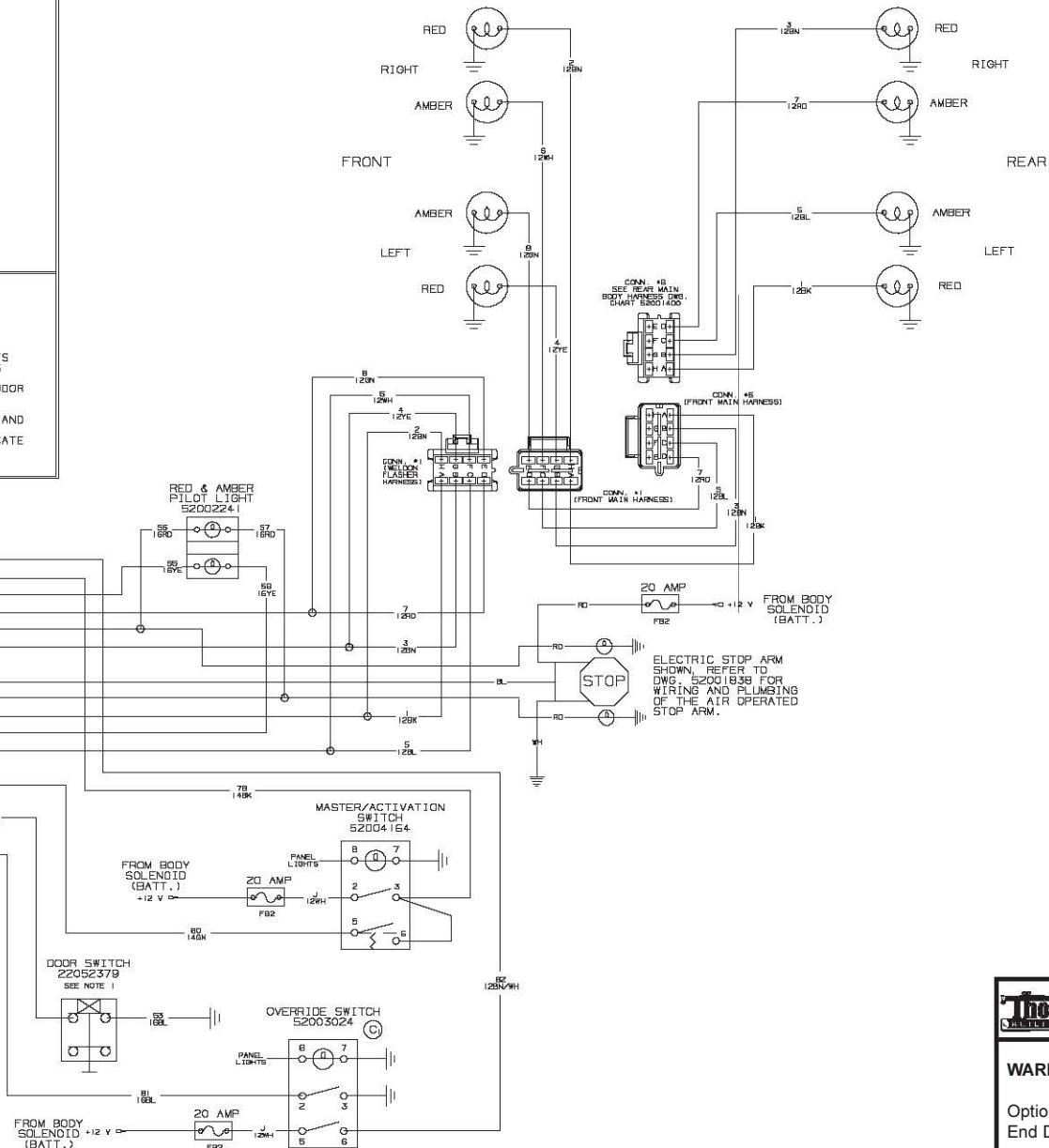
### B3580-13-000 SYSTEM OPERATION

1. FOUR 7" AMBER LIGHTS AND FOUR 7" RED LIGHTS.
2. AMBER LIGHTS MANUALLY ENERGIZED BY ROCKER SWITCH LOCATED ON THE SWITCH PANEL.
3. RED LIGHTS AUTOMATICALLY ENERGIZED (WITH AMBER LIGHTS AUTOMATICALLY DE-ENERGIZED) WHEN BUS SERVICE DOOR IS OPENED.
4. RED LIGHTS AND STOP ARM ACTIVATED WHENEVER SERVICE DOOR IS OPENED (NONSEQUENTIAL).
5. MASTER SWITCH LOCATED IN SWITCH PANEL.
6. OVERRIDE SWITCH IN SWITCH PANEL TO FLASH RED LIGHTS AND EXTEND STOP ARM.
7. RED AND AMBER PILOT LIGHT IN SWITCH CABINET TO INDICATE SYSTEM OPERATION.
8. WELDON 7000 ELECTRONIC FLASHER.



#### NOTES:

1. USE PRESSURE SWITCH 22036377 WHEN AIR SERVICE DOORS ARE ORDERED.
2. WIRING HARNESS 52000313 IS USED FOR WIRING INSIDE THE SWITCH CABINET.



52002500 E

#### WARNING LIGHTS

Option: B3580-13-000  
End Date: 10/17/01

ON

EMERGENCY WARNING

110/112

OFF

PILOT

52002241

ARMED

WARNING

ON

110/112

OFF

MASTER/ACTIVATION

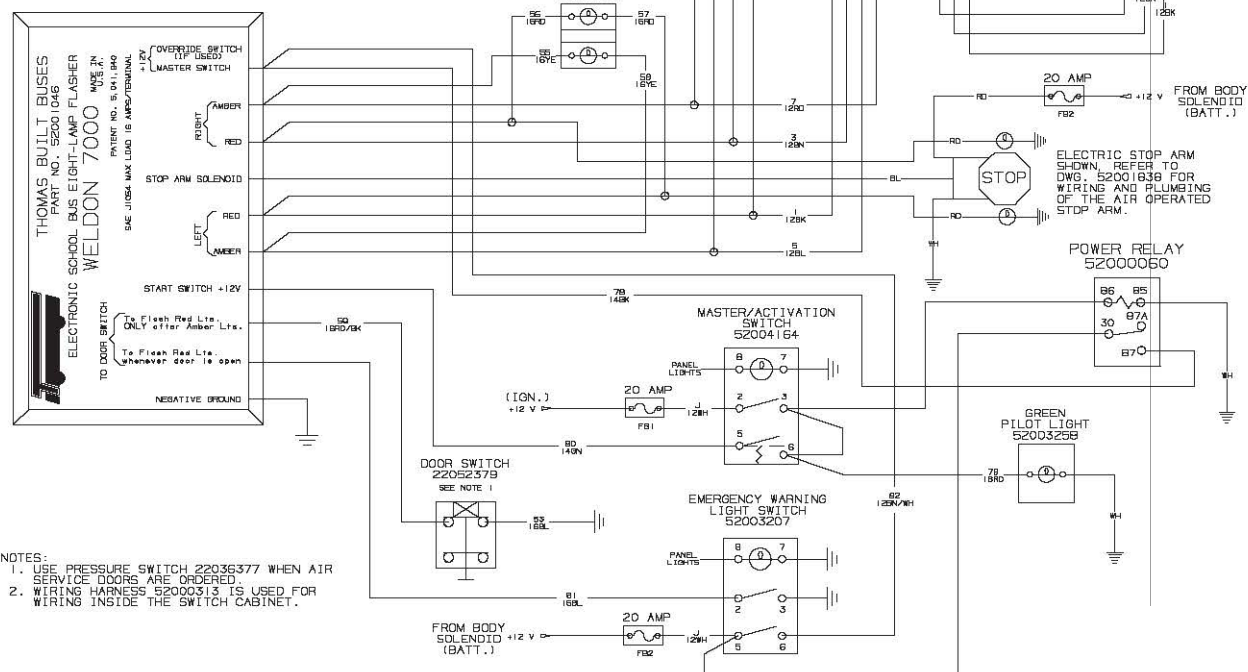
52004164

GREEN PILOT

52003258

B3580-13-000  
SYSTEM OPERATION

1. FOUR 7" AMBER LIGHTS AND FOUR 7" RED LIGHTS
2. AMBER LIGHTS MANUALLY ENERGIZED BY ROCKER SWITCH LOCATED ON THE SWITCH PANEL.
3. RED LIGHTS MANUALLY ENERGIZED (WITH AMBER LIGHTS AUTOMATICALLY DE-ENERGIZED) WHEN BUS SERVICE DOOR IS OPENED.
4. RED LIGHTS AND STOP ARM ACTIVATED WHENEVER SERVICE DOOR IS OPENED (NONSEQUENTIAL).
5. MASTER SWITCH LOCATED IN SWITCH PANEL.
6. STOP ARM IN SWITCH PANEL TO FLASH RED LIGHTS AND EXTEND STOP ARM.
7. RED AND AMBER PILOT LIGHT IN SWITCH CABINET TO INDICATE SYSTEM OPERATION.
8. WELDON 7000 ELECTRONIC FLASHER.



NOTES:

1. USE PRESSURE SWITCH 22036377 WHEN AIR SERVICE DOORS ARE ORDERED.
2. WIRING HARNESS 52000313 IS USED FOR WIRING INSIDE THE SWITCH CABINET.



**WARNING LIGHTS  
w/EMERGENCY OVER-  
RIDE**

Option: B3580-13-000

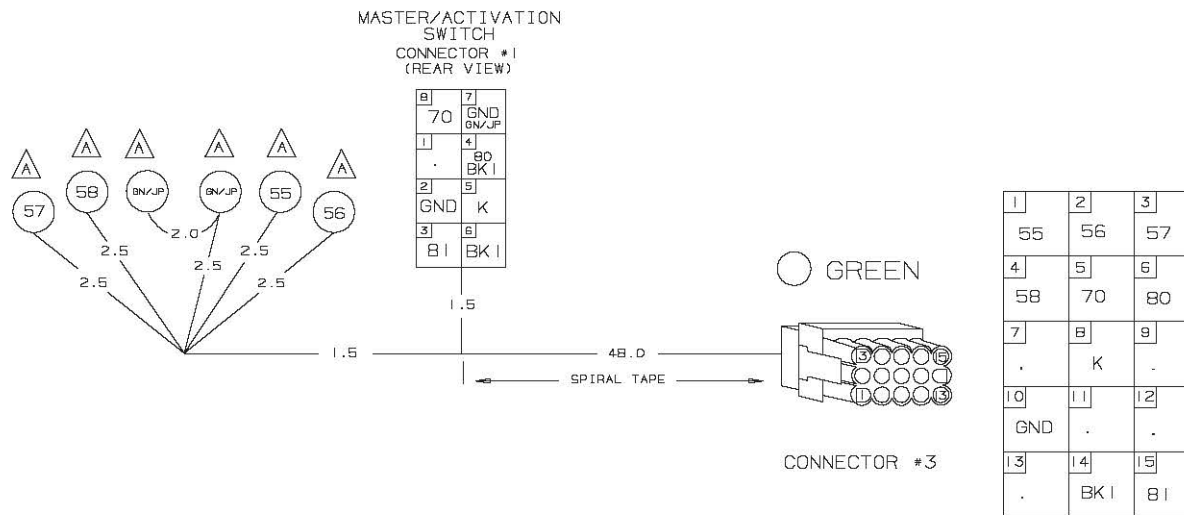


CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLING	99916716001	SWITCH CONNECTOR	1
	PED	12015869	18-20 GA TERMINAL	3
	PED	12015870	14-16 GA TERMINAL	4
	PED	12084580	10-12 GA TERMINAL	0
3	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	10
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	.
	AMP	770023-1	15 POSITION CONNECTOR, PLUG.	1
RELAY	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

5. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.  
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.  
3. FULLY TAPE BREAKOUTS FOR 3"-2" SPACING OTHERWISE.  
2. TAG HARNESS FOR IDENTIFICATION.  
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"

NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
K	16	RED	12 V+ (IGN.) FROM FUSE PANEL.
80	16	GREEN	ACTIVATION SW (AMBER) TO FLASHER.
GND	16	WHITE	CHASSIS GROUND.
55	18	YELLOW	WARNING LIGHT TO WELDON, AMBER.
56	18	RED	WARNING LIGHT TO WELDON, RED.
BK1	16	BLACK	TO WELDON RELAY, (+) TRIGGER
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+)
GN/JP	18	GREEN	GROUND, SWITCH LIGHT JUMPER (-)
B1	16	BLUE/WHITE	TO WELDON, RED LIGHTS ACTIVATION.
57	18	RED	WARNING LIGHT TO WELDON, RED.
58	18	YELLOW	WARNING LIGHT TO WELDON, AMBER.



OPTION: B3580-15-000  
(SRW, DRW MODELS ONLY)

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	6
	VENDOR	PART #	DESCRIPTION	QTY

<b>Thomas</b> SOLUTIONS	<b>52003617 B</b>
<b>HARNESS, EIGHT LIGHT WARNING SYSTEM</b>	
Option: B3580-15-000 End Date: 9/6/02	





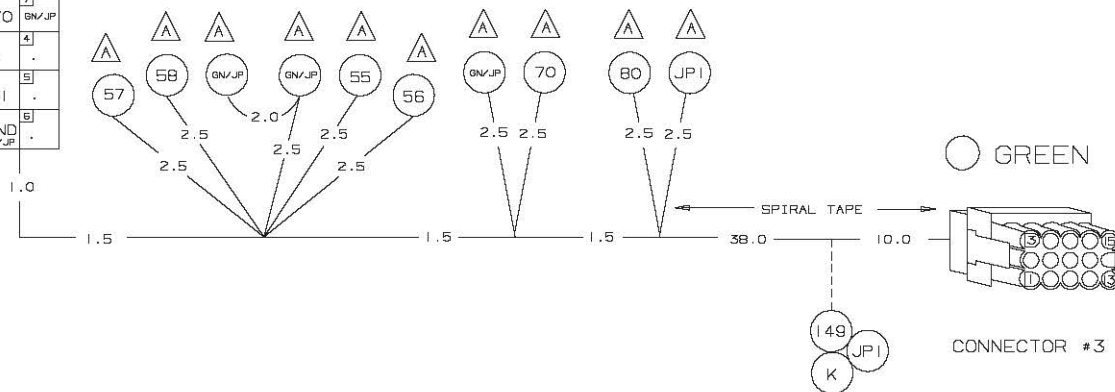
CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLING	99916716001	SWITCH CONNECTOR	1
	PED	12015869	18-20 GA TERMINAL	2
	PED	12015870	14-16 GA TERMINAL	2
	PED	12084590	10-12 GA TERMINAL	0
3	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	10
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	0
	AMP	770023-1	15 POSITION CONNECTOR, PLUG.	1
RELAY	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

5. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
  4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
  3. FULLY TAPE BREAKOUTS FOR 3"-2" SPACING OTHERWISE.
  2. TAG HARNESS FOR IDENTIFICATION.
  1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"
- NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
K	12	RED	12V+ IGN. FROM FUSE PANEL.
JP1	16	RED	JUMPER TO ACTIVATION SWITCH. (+)
80	16	GREEN	ACTIVATION SW (AMBER) TO FLASHER.
GND	16	WHITE	CHASSIS GROUND.
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+)
GN/JP	18	GREEN	GROUND, SWITCH LIGHT JUMPER (-).
149	12	BLACK	SWITCH HARNESS JUMPER.
55	18	YELLOW	WARNING LIGHT TO WELDON, AMBER.
56	18	RED	WARNING LIGHT TO WELDON, RED.
81	16	BLUE/WHITE	TO WELDON, RED LIGHT ACTIVATE.
57	18	RED	WARNING LIGHT TO WELDON, RED.
58	18	YELLOW	WARNING LIGHT TO WELDON, AMBER.

VERRIDE  
CONNECTOR #1  
(REAR VIEW)

70	GN/JP
1	.
2	5
81	.
3	5
GND	GN/JP



1	2	3
55	56	57
4	5	6
58	70	80
7	8	9
.	K	.
10	11	12
GND	.	.
13	14	15
149	.	81

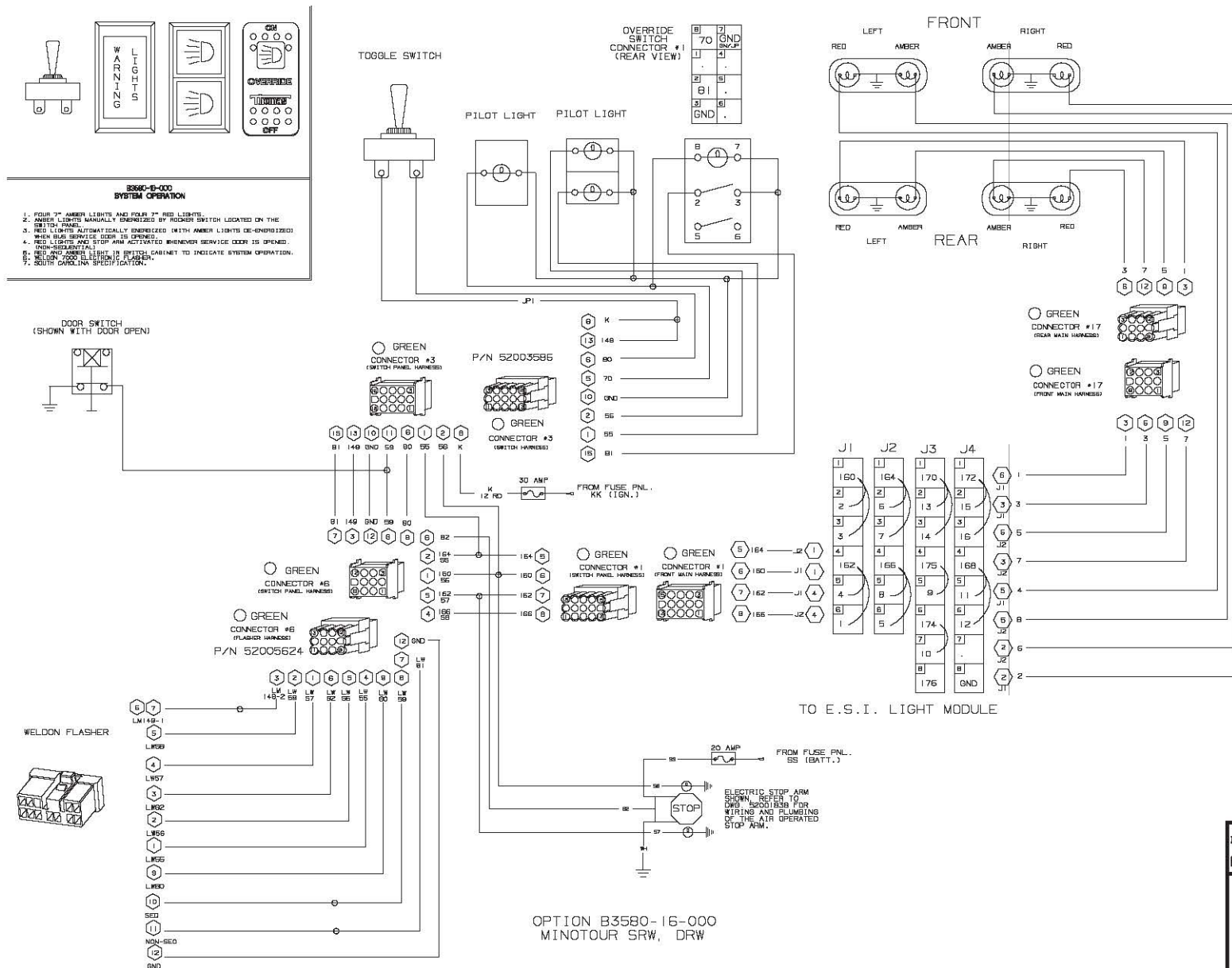
D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	10
VENDOR	PART #	DESCRIPTION	QTY	

OPTION: B3580-16-000  
(SRW, DRW MODELS ONLY)

**52003586 B**

**HARNESS, EIGHT LIGHT WARNING SYSTEM**

Option: B3580-16-000  
End Date: 9/6/02

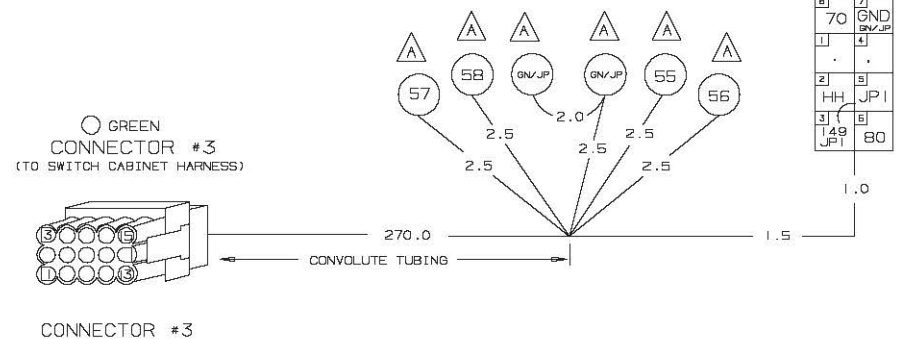


CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLING	99916716001	SWITCH CONNECTOR	1
	PED	12015869	18-20 GA TERMINAL	1
	PED	12015970	14-16 GA TERMINAL	3
	PED	12094590	10-12 GA TERMINAL	2
3	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	7
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	2
	AMP	770023-1	15 POSITION CONNECTOR, PLUG.	1
RELAY	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

5. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
  4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
  3. FULLY TAPE BREAKOUTS FOR 3"-2" SPACING OTHERWISE.
  2. TAG HARNESS FOR IDENTIFICATION.
  1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"
- NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
HH	10	RED	12V+ BAT. FROM FUSE PANEL.
149	10	BLACK	TO WELDON MASTER POWER (12V+)
80	16	GREEN	ACTIVATION SW (AMBER) TO FLASHER.
GND	18	WHITE	CHASSIS GROUND.
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+)
55	18	YELLOW	WARNING LIGHT TO WELDON, AMBER.
56	18	RED	WARNING LIGHT TO WELDON, RED.
GN/JP	18	GREEN	GROUND, SWITCH LIGHT JUMPER. (-)
57	18	RED	WARNING LIGHT TO WELDON, RED.
58	18	YELLOW	WARNING LIGHT TO WELDON, AMBER.
JP1	18	BLACK	SWITCH JUMPER.
.	.	.	.

1	2	3
55	56	57
4	5	6
58	70	80
7	8	9
.	.	HH
10	11	12
GND	.	.
13	14	15
149	.	.



D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	6
VENDOR	PART #	DESCRIPTION	QTY	

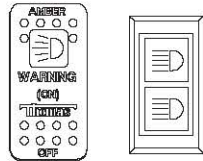
OPTION: B3580-17-000  
(SRW, DRW MODELS ONLY)

**52003616 B**

**HARNESS, EIGHT LIGHT WARNING SYSTEM**

Option: B3580-17-000  
 End Date: 9/6/02

## SWITCH LAYOUT



MASTER/  
ACTIVATION  
52003015

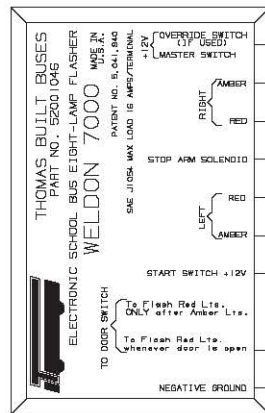
PILOT  
52002241

### SWITCH BOX REQUIRED

	MANUAL DOOR	AIR DOOR	ELECTRIC DOOR
CONV.	52002144	52002145	52002145
VISTA	5200221B	52002437	52002437
PUSH		DASH	DASH
F.C.	5200221B	52002225	52002225

### B3580-17-000 SYSTEM OPERATION

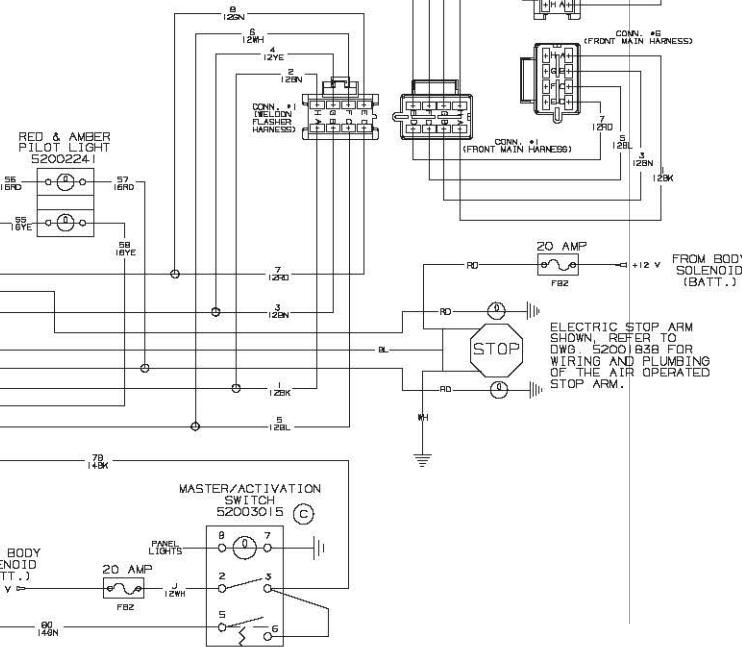
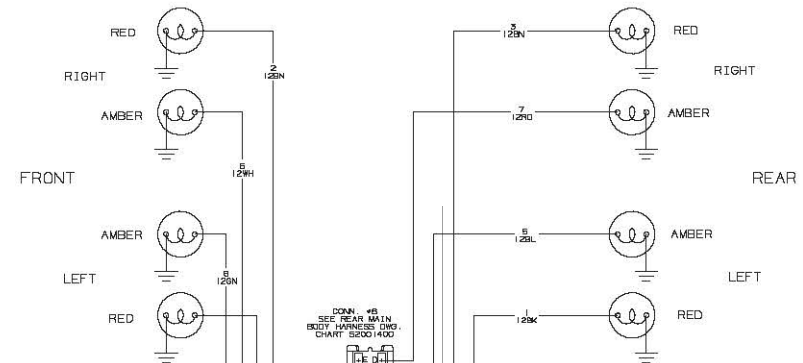
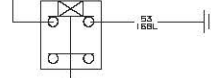
1. FOUR 7" AMBER LIGHTS AND FOUR 7" RED LIGHTS.
2. AMBER LIGHTS MANUALLY ENERGIZED BY ROCKER SWITCH LOCATED ON THE DASH PANEL (ER) OR IN A SWITCH BOX RIGHT OF STEERING COLUMN.
3. RED LIGHTS AUTOMATICALLY ENERGIZED (WITH AMBER LIGHTS AUTOMATICALLY DE-ENERGIZED) WHEN BUS SERVICE DOOR IS OPENED.
4. RED LIGHTS AND STOP ARM ACTIVATED WHENEVER SERVICE DOOR IS OPENED (NONSEQUENTIAL).
5. MASTER SWITCH LOCATED ON DASH PANEL (ER) OR IN SWITCH BOX RIGHT OF STEERING COLUMN.
6. RED AND AMBER PILOT LIGHT ON DASH PANEL (ER) OR SWITCH BOX RIGHT OF STEERING COLUMN TO INDICATE SYSTEM OPERATION.
7. WELDON 7000 ELECTRONIC FLASHER.



#### NOTES:

1. USE PRESSURE SWITCH 22036377 WHEN AIR SERVICE DOORS ARE ORDERED.
2. WIRING HARNESS 52000176 IS USED FOR WIRING TO THE SWITCH BOX.

DOOR SWITCH  
22052379  
SEE NOTE 1

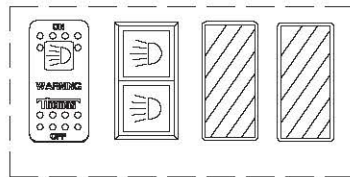


52002519 B

### EIGHT LIGHT WARNING SYSTEM

Option: B3580-17-000



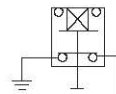


SWITCHES MOUNTED IN CONTROL BOX LOCATED ON TOP OF MANUAL DOOR CONTROL MECHANISM.

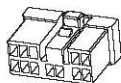
#### B3580-17-000 SYSTEM OPERATION

1. FOUR 7" AMBER LIGHTS AND FOUR 7" RED LIGHTS AMBER LIGHTS MANUALLY ENERGIZED BY REDUCED SWITCH LOCATED ON THE SWITCH PANEL. (SWITCH FOR REDUCED OF STOPPING COLUMN).
2. RED LIGHTS AUTOMATICALLY ENERGIZED WITH AMBER LIGHTS DE-ENERGIZED WHEN BUS SERVICE DOOR IS OPENED.
3. RED LIGHTS AND STOP ARM ACTIVATED WHENEVER SERVICE DOOR IS OPENED.
4. MASTER SWITCH IS LOCATED ON DASH PANEL OR IN SWITCH BOX TO RIGHT OF STOPPING COLUMN.
5. RED AND AMBER PILOT LIGHT LOCATED ON DASH PANEL OR IN SWITCH BOX TO RIGHT OF STOPPING COLUMN.
6. RED AND AMBER PILOT LIGHT LOCATED ON DASH PANEL OR IN SWITCH BOX TO RIGHT OF STOPPING COLUMN.
7. WELDON 7000 ELECTRONIC FLASHER.
8. NEW TAMPSTONE SPECIFICATION.

DOOR SWITCH  
(SHOWN WITH DOOR OPEN)



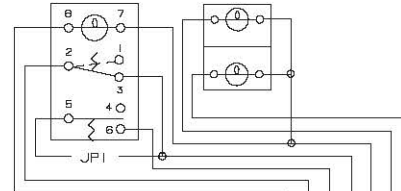
WELDON FLASHER



MASTER/ACTIVATION  
SWITCH  
CONNECTOR #1  
(REAR VIEW)



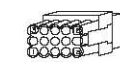
PILOT LIGHT



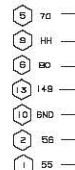
GREEN  
CONNECTOR #3  
(SWITCH PANEL HARNESS)



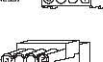
P/N 52003616



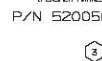
GREEN  
CONNECTOR #3  
(SWITCH HARNESS)



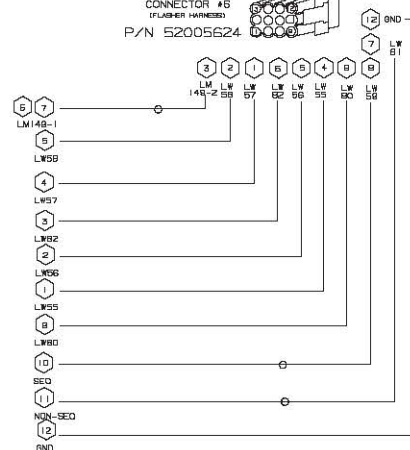
GREEN  
CONNECTOR #6  
(SWITCH PANEL HARNESS)



GREEN  
CONNECTOR #6  
(FLASHER HARNESS)



P/N 52005624



30 AMP  
FROM FUSE PNL.  
HH (BAT.)



GREEN  
CONNECTOR #1  
(SWITCH PANEL HARNESS)



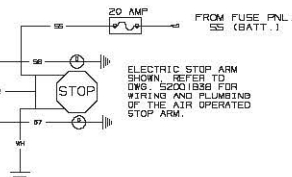
GREEN  
CONNECTOR #1  
(FRONT MAIN HARNESS)



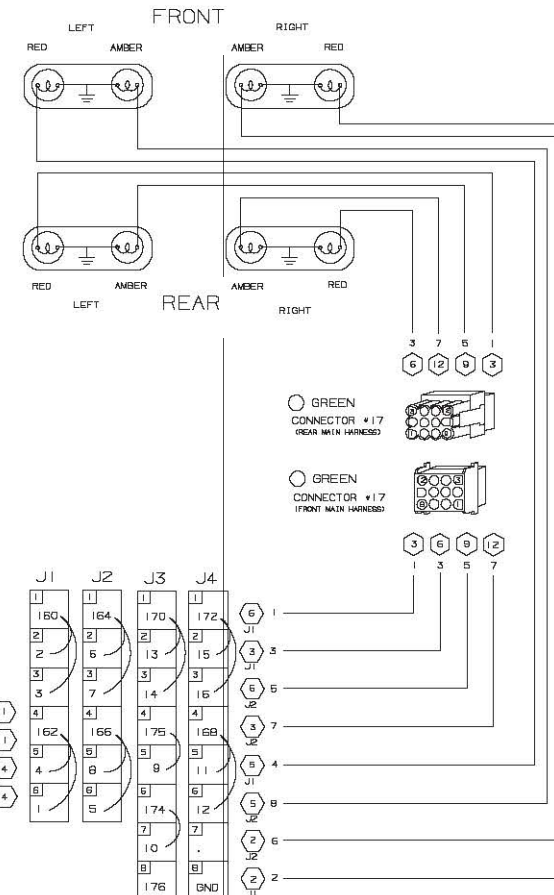
5 164 J2 1



TO E.S.I. LIGHT MODULE



OPTION B3580-17-000  
MINOTOUR SRW, DRW



GREEN  
CONNECTOR #17  
(REAR MAIN HARNESS)



GREEN  
CONNECTOR #17  
(FRONT MAIN HARNESS)



52003652 C

**EIGHT LIGHT WARNING  
SYSTEM**

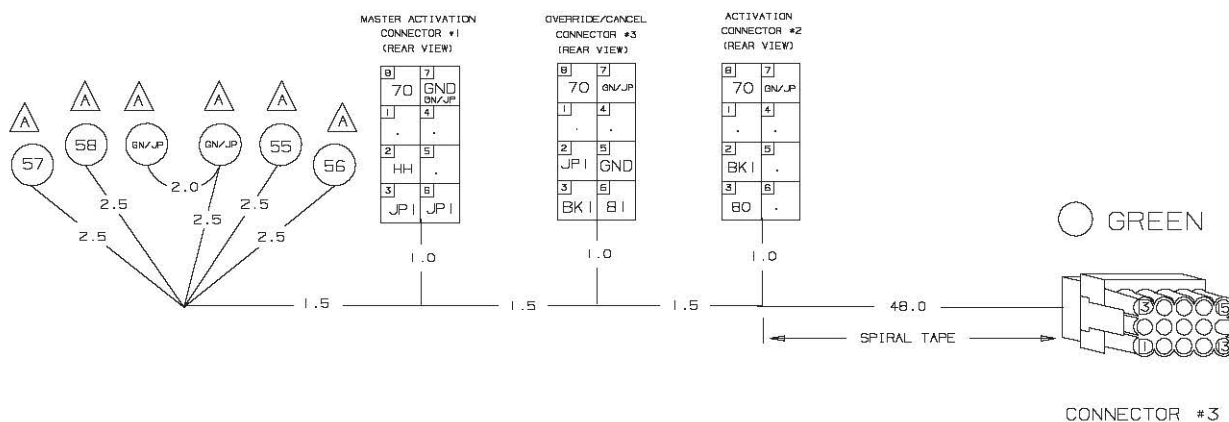
Option: B3580-17-000



CONN	VENDOR	PART #	DESCRIPTION	QTY
1, 2, 3	CARLING	99916716001	SWITCH CONNECTOR	3
	PED	12015969	18-20 GA TERMINAL	3
	PED	12015870	14-16 GA TERMINAL	12
	PED	12084590	10-12 GA TERMINAL	0
3	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	10
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	0
	AMP	770023-1	15 POSITION CONNECTOR, PLUG.	1
RELAY	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

5. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.  
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.  
3. FULLY TAPE BREAKOUTS FOR 3"-2" SPACING OTHERWISE.  
2. TAG HARNESS FOR IDENTIFICATION.  
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"  
NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
HH	16	RED	12V+ BAT. FROM FUSE PANEL.
BK1	16	BLACK	FROM SWITCH TO WELDON RELAY (+).
80	16	GREEN	ACTIVATION SW (AMBER) TO FLASHER.
GND	16	WHITE	CHASSIS GROUND.
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+)
GN/JP	18	GREEN	GROUND, SWITCH LIGHT JUMPER (-).
JP1	16	BLACK/WHITE	SWITCH HARNESS JUMPER.
55	18	YELLOW	WARNING LIGHT TO WELDON, AMBER.
56	18	RED	WARNING LIGHT TO WELDON, RED.
81	18	BLUE/WHITE	TO WELDON, RED LIGHT ACTIVATION.
57	18	RED	WARNING LIGHT TO WELDON, RED.
58	18	YELLOW	WARNING LIGHT TO WELDON, AMBER.



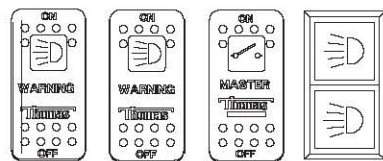
1	2	3
55	56	57
4	5	6
58	70	80
7	8	9
.	.	HH
10	11	12
GND	.	.
13	14	15
.	BK1	81

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	6
	VENDOR	PART #	DESCRIPTION	QTY

OPTION: B3580-20-000  
(SRW, DRW MODELS ONLY)

52003585 B

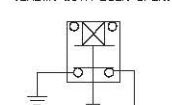
**HARNESS, EIGHT LIGHT WARNING SYSTEM**  
Option: B3580-20-000  
End Date: 9/6/02



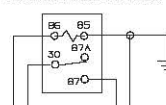
# B3580-20-000 & B3580-25-000 SYSTEM OPERATION

1. FOUR 7" AMBER LIGHTS AND FOUR 3" RED LIGHTS
2. AMBER LIGHTS MANUALLY ENERGIZED BY ROCKER SWITCH LOCATED ON THE SWITCH PANEL.
3. RED LIGHTS AUTOMATICALLY ENERGIZED (WITH AMBER LIGHTS DE-ENERGIZED) WHEN BUS SERVICE OPER. IS OCCURRING.
4. AMBER LIGHTS CAN ALSO BE DEACTIVATED BY ROCKER SWITCH LOCATED ON SWITCH PANEL.
5. RED LIGHTS AND STOP ARM ACTIVATED ONLY AFTER AMBER LIGHTS.
6. MASTER SWITCH IS LOCATED IN SWITCH PANEL.
7. DEACTIVATE SWITCH IN SWITCH PANEL, (TO FLASH) RED LIGHTS AND EXTEND STOP ARM.
8. STOP AND AMBER LIGHT SWITCH CABINET TO INDICATE SYSTEM OPERATION.
9. WELDON 7000 ELECTRONIC FLASHER.
10. MAINTENANCE SPECIFICATION.
11. CSA-USED.

DOOR SWITCH  
(SHOWN WITH DOOR OPEN)



POWER RELAY  
(SWITCH PANEL HARNESS)



30 AMP  
12 RD

FROM FUSE PNL.  
CC (BATT.)

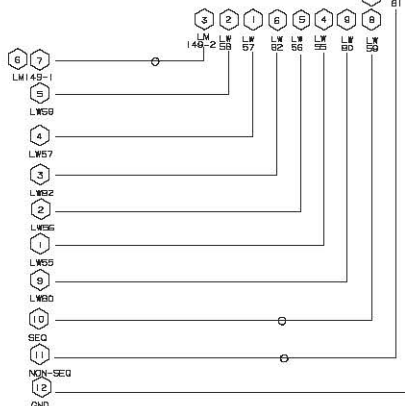
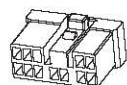
CONNECTED TO A SWITCHED SOURCE (IGN.)  
SOURCE (IGN.)

GREEN  
CONNECTOR #4B  
(SWITCH PANEL HARNESS)

GREEN  
CONNECTOR #6  
(FLASHER HARNESS)

P/N 52005624

WELDON FLASHER



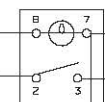
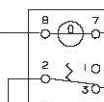
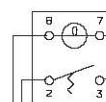
ACTIVATION  
SWITCH  
CONNECTOR #2  
(REAR VIEW)



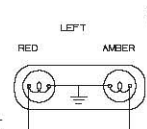
OVERRIDE  
SWITCH  
CONNECTOR #3  
(REAR VIEW)



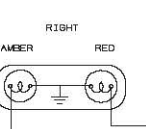
MASTER  
SWITCH  
CONNECTOR #1  
(REAR VIEW)



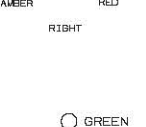
PILOT LIGHT



FRONT

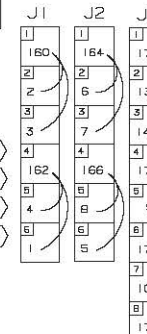


REAR



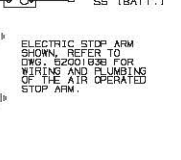
GREEN  
CONNECTOR #17  
(REAR MAIN HARNESS)

GREEN  
CONNECTOR #17  
(FRONT MAIN HARNESS)



TO E.S.I. LIGHT MODULE

20 AMP  
FROM FUSE PNL.  
SS (BATT.)



ELECTRIC STOP ARM  
SHOWN. REFER TO  
DWG. 52001938 FOR  
WIRING AND PLUMBING  
OF THE AIR OPERATED  
STOP ARM.

OPTION B3580-20-000  
MINITOUR SRW, DRW

52003653 D

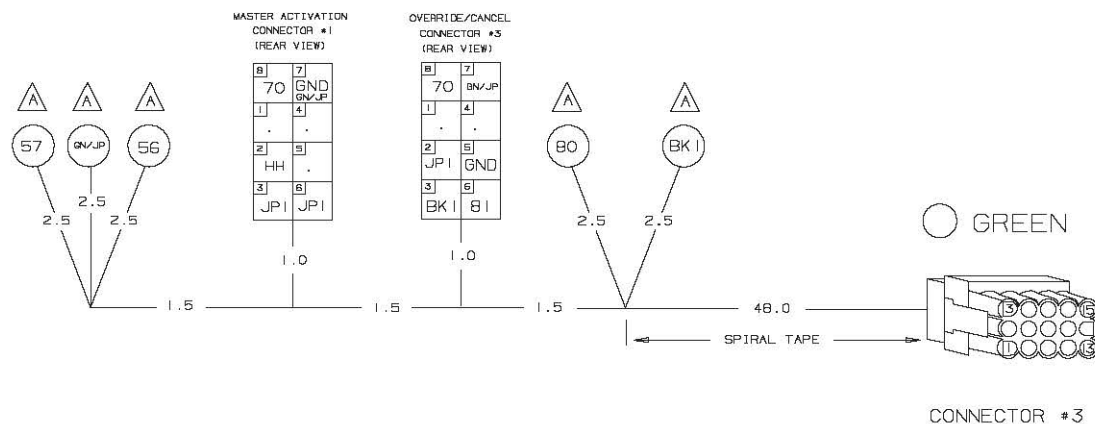
**EIGHT LIGHT WARNING  
SYSTEM**

Option: B3580-17-000  
End Date: 9/6/02

CONN	VENDOR	PART #	DESCRIPTION	QTY
1, 2	CARLING	99916716001	SWITCH CONNECTOR	2
	PED	12015869	18-20 GA TERMINAL	3
	PED	12015870	14-16 GA TERMINAL	8
	PED	12084590	10-12 GA TERMINAL	0
3	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	8
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	0
	AMP	770023-1	15 POSITION CONNECTOR, PLUG.	1
RELAY	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

5. STRIP INSULATION BACK 3/8" ON  
UNTERMINATED LEADS.  
4. REFER TO DWG. #52001136 FOR HARNESS  
SPECIFICATIONS.  
3. FULLY TAPE BREAKOUTS FOR 3"-  
2" SPACING OTHERWISE.  
2. TAG HARNESS FOR IDENTIFICATION.  
1. CIRCUIT NUMBERS TO BE STAMPED AT  
4" INTERVALS WITH THE PREFIX "B"  
NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
HH	16	RED	12V+ BAT. FROM FUSE PANEL.
BK1	16	BLACK	FROM SWITCH TO WELDON RELAY (+).
80	16	GREEN	ACTIVATION SW (AMBER) TO FLASHER.
GND	16	WHITE	CHASSIS GROUND.
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+).
GN/JP	18	GREEN	GROUND, SWITCH LIGHT JUMPER (-).
JP1	16	BLACK/WHITE	SWITCH HARNESS JUMPER.
56	18	RED	WARNING LIGHT TO WELDON, RED.
81	18	BLUE/WHITE	TO WELDON, RED LIGHT ACTIVATION.
57	18	RED	WARNING LIGHT TO WELDON, RED.
.	.	.	.
.	.	.	.



1	2	3
.	56	57
4	5	6
.	70	80
7	8	9
.	.	HH
10	11	12
GND	.	.
13	14	15
.	BK1	81

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	5
	VENDOR	PART #	DESCRIPTION	QTY

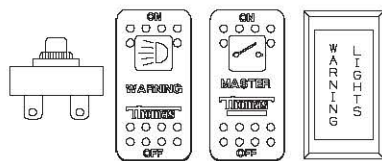
OPTION: B3580-20-001  
(SRW, DRW MODELS ONLY)

52003609 B

**HARNESS, EIGHT LIGHT  
WARNING SYSTEM**

Option: B3580-20-001  
End Date: 9/6/02

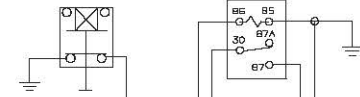




# B3580-20-001 SYSTEM OPERATION

1. EIGHT 7" RED LIGHTS.
2. INSIDE RED LIGHTS MANUALLY ENERGIZED BY ROCKER SWITCH ON SWITCH PANEL.
3. OUTSIDE RED LIGHTS AUTOMATICALLY ENERGIZED WITH INSIDE RED LIGHTS AUTOMATICALLY DE-ENERGIZED WHEN BUS SERVICE DOOR IS OPENED.
4. INSIDE RED LIGHTS CAN ALSO BE DEACTIVATED BY ROCKER SWITCH ON SWITCH PANEL.
5. MASTER SWITCH WITH PILOT LIGHT IS LOCATED IN SWITCH PANEL.
6. DEACTIVATE SWITCH IN SWITCH PANEL TO FLASH RED LIGHTS AND SOUND STOP ARM.
7. RED PILOT LIGHT IN SWITCH PANEL TO INDICATE SYSTEM OPERATION.
8. NELSON 7000 ELECTRONIC FLASHER.
9. SARGENTHEMAN SPECIFICATION.

DOOR SWITCH (SHOWN WITH DOOR OPEN) POWER RELAY (SWITCH PANEL HARNESS)



30 AMP FROM FUSE PNL. CC (BATT.)

12 RD

CC (BATT.)

12 RD

12 RD

12 RD

12 RD

12 RD

12 RD

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12 RD

OVERIDE SWITCH CONNECTOR #3 (REAR VIEW)

70 GND JP1

70 GND JP1

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70 GND JP1

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MASTER SWITCH CONNECTOR #1 (REAR VIEW)

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MASTER SWITCH CONNECTOR #1 (REAR VIEW)

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MASTER SWITCH CONNECTOR #1 (REAR VIEW)

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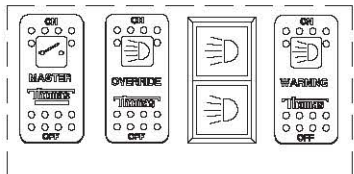
70 GND JP1

70 GND JP1





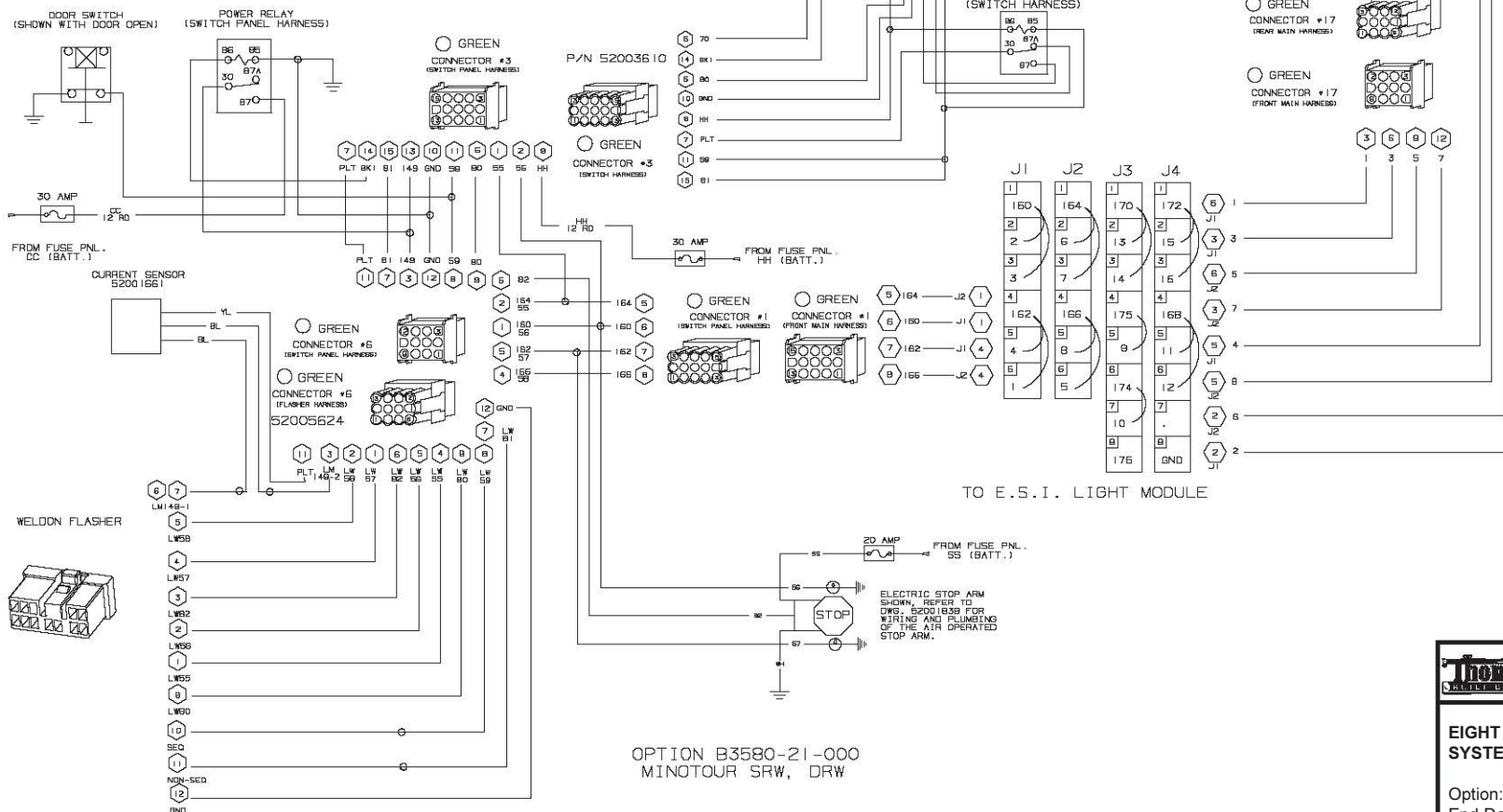




SWITCHES MOUNTED IN CONTROL BOX LOCATED ON TOP OF MANUAL DOOR CONTROL MECHANISM.

#### B3580-21-000 SYSTEM OPERATION

- FOUR 7" AMBER LIGHTS AND FOUR 7" RED LIGHTS.
- AMBER LIGHTS MANUALLY ENERGIZED BY DOOR SWITCH LOCATED ON THE SWITCH PANEL. (IN A CONTROL BOX LOCATED TO THE RIGHT OF THE STEERING COLUMN.)
- RED LIGHTS AUTOMATICALLY ENERGIZED WHEN AMBER LIGHTS DE-ENERGIZED.
- WHEN BUS SERVICE DOOR IS OPENED.
- RED LIGHTS AND STOP ARM ACTIVATED WHENEVER SERVICE DOOR IS OPENED.
- MASTER SWITCH LOCATED ON SWITCH PANEL OR IN SWITCH BOX LOCATED TO THE RIGHT OF THE STEERING COLUMN.
- OVERRIDE SWITCH LOCATED ON SWITCH PANEL OR IN A SWITCH BOX LOCATED TO THE RIGHT OF THE STEERING COLUMN.
- RED AND AMBER PULS LIGHT ON SWITCH PANEL OR IN A CONTROL BOX LOCATED TO THE RIGHT OF THE STEERING COLUMN TO INDICATE SYSTEM OPERATION.
- WELDON 7000 ELECTRONIC FLASHER.
- MARYLAND SPECIFICATION.



<b>Thomas</b> SOLUTIONS	<b>52003657 D</b>
<b>EIGHT LIGHT WARNING SYSTEM</b>	
Option: B3580-21-000 End Date: 9/6/02	

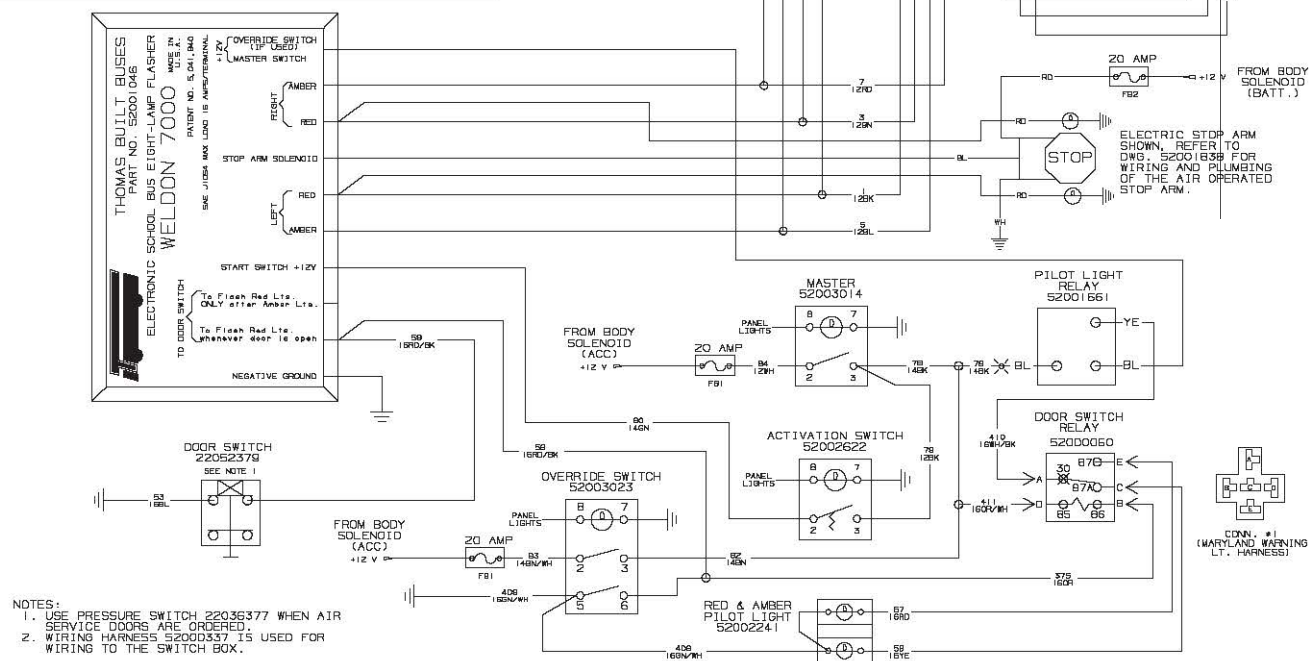
Diagram illustrating the four types of door release buttons:

- ACTIVATION** 5200262: Button with 'ON' and 'OFF' labels, a 'D' symbol, and a 'WARNING' label.
- PILOT** 5200224: Button with a 'D' symbol.
- OVERRIDE** 5200302: Button with 'ON', 'OFF', and 'WARNING' labels, a 'D' symbol, and a 'WARNING' label.
- MASTER** 5200304: Button with 'ON', 'OFF', and 'WARNING' labels, a 'D' symbol, and a 'WARNING' label.

SWITCH BOX REQUIRED			
	MANUAL DOOR	AIR DOOR	ELECTRIC DOOR
CONV.	52002144	52002145	52002145
VISTA	52002218	52002437	52002437
PUSH		DASH	DASH
F.C.	52002218	52002225	52002225

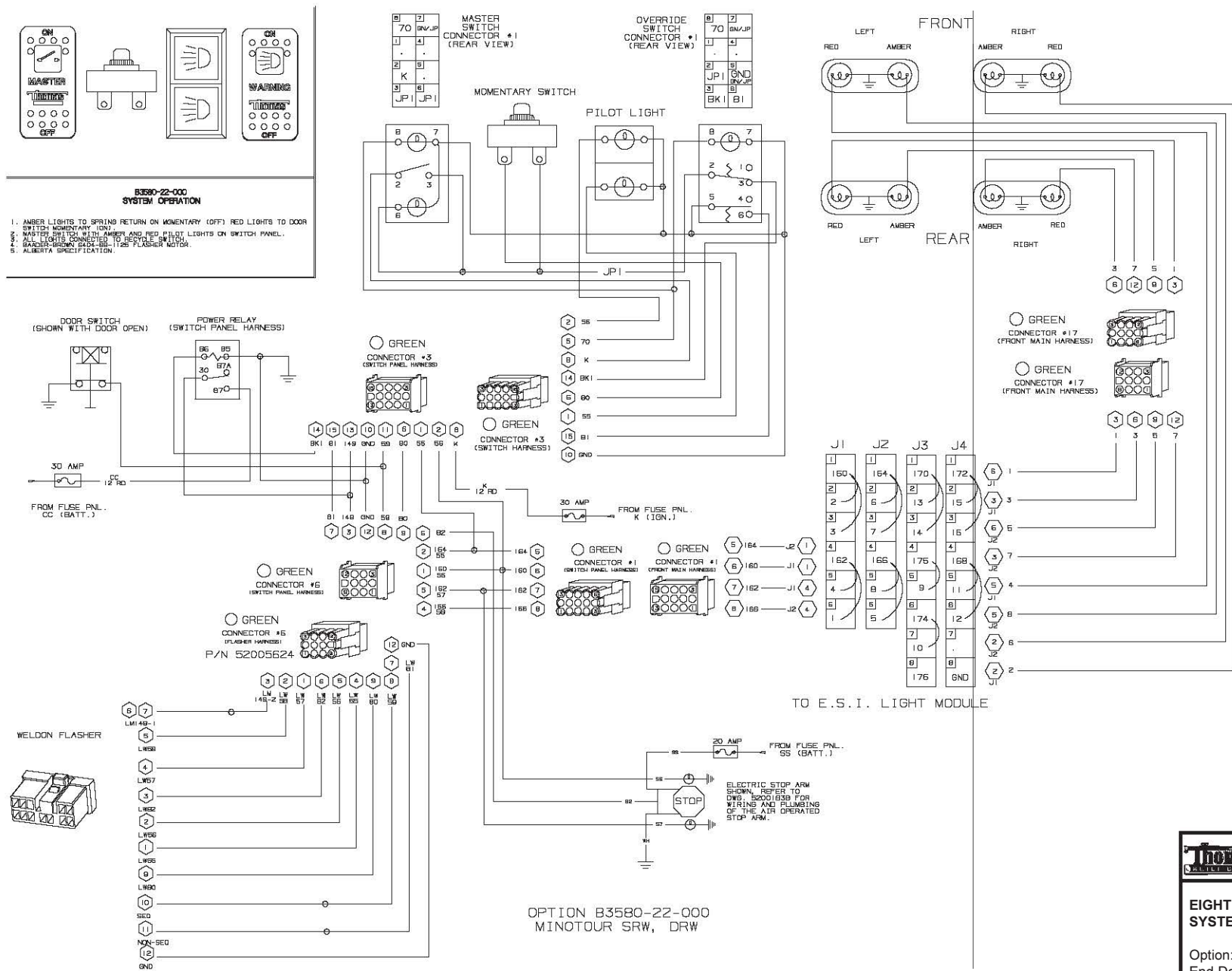
B3680-21-000  
SYSTEM OPERATION

4. FOUR 7" AMBER LIGHTS AND FOUR 7" RED LIGHTS.
5. AMBER LIGHTS MANUALLY ENERGIZED BY ROCKER SWITCH LOCATED ON THE DASH PANEL (ER) OR IN A SWITCH BOX TO THE LEFT OF STEERING COLUMN.
6. RED LIGHTS AUTOMATICALLY ENERGIZED (WITH AMBER LIGHTS AUTOMATICALLY DE-ENERGIZED) WHEN BUS SERVICE DOOR IS OPENED.
7. RED LIGHTS AND STOP ARM ACTIVATED WHENEVER SERVICE DOOR IS OPENED (NONSEQUENTIAL).
8. SWITCH BOX RIGHT OF STEERING COLUMN LOCATED ON THE DASH PANEL (ER) OR IN A SWITCH BOX RIGHT OF STEERING COLUMN.
9. OVERSIDE SWITCH LOCATED ON DASH PANEL (ER) OR IN SWITCH BOX RIGHT OF STEERING COLUMN TO FLASH RED LIGHTS AND STOP ARM.
10. RED PILOT LIGHT ON DASH PANEL (ER) OR IN CONTROL BOX TO INDICATE SYSTEM OPERATION.
11. WELDON 7000 ELECTRONIC FISHER.



	52003526 C
<p><b>EIGHT LIGHT WARNING SYSTEM</b></p>	
<p>Option: B3580-21-000</p>	





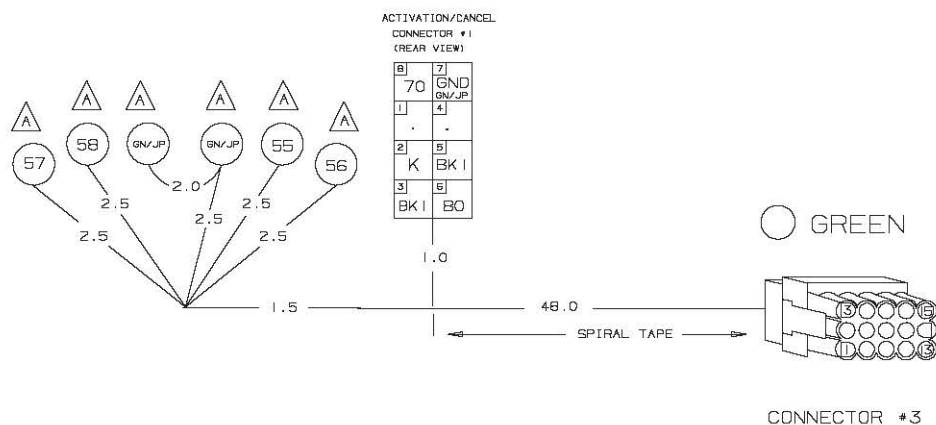
OPTION B3580-22-000  
MINOTOUR SRW, DRW

	52003667 D
<b>EIGHT LIGHT WARNING SYSTEM</b>	
Option: B3580-22-000 End Date: 9/6/02	

CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLING	99916716001	SWITCH CONNECTOR	1
	PED	12015869	18-20 GA TERMINAL	1
	PED	12015870	14-16 GA TERMINAL	5
	PED	12084590	10-12 GA TERMINAL	0
3	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	9
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	.
	AMP	770023-1	15 POSITION CONNECTOR, PLUG.	1
	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
RELAY	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

5. STRIP INSULATION BACK 3/8" ON  
UNTERMINATED LEADS.  
4. REFER TO DWG. #52001136 FOR HARNESS  
SPECIFICATIONS.  
3. FULLY TAPE BREAKOUTS FOR 3"-  
2" SPACING OTHERWISE.  
2. TAG HARNESS FOR IDENTIFICATION.  
1. CIRCUIT NUMBERS TO BE STAMPED AT  
4" INTERVALS WITH THE PREFIX "B"  
NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
BK1	18	BLACK	FROM SWITCH TO WELDON RELAY (+)
80	18	GREEN	ACTIVATION SW (AMBER) TO FLASHER.
GND	18	WHITE	CHASSIS GROUND.
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+)
55	18	YELLOW	WARNING LIGHT TO WELDON, AMBER.
56	18	RED	WARNING LIGHT TO WELDON, RED.
K	18	RED	12 V+ (IGN.) FROM FUSE PANEL.
GN/JP	18	GREEN	GROUND, SWITCH LIGHT JUMPER. (-)
57	18	RED	WARNING LIGHT TO WELDON, RED.
58	18	YELLOW	WARNING LIGHT TO WELDON, AMBER.
.	.	.	.
.	.	.	.



1	2	3
55	56	57
4	5	6
58	70	80
7	8	9
.	K	.
10	11	12
GND	.	.
13	14	15
.	BK1	.

OPTION: B3580-23-000  
(SRW, DRW MODELS ONLY)

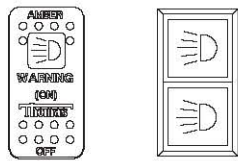
D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	6
	VENDOR	PART #	DESCRIPTION	QTY

52003608 B

**HARNESS, EIGHT LIGHT  
WARNING SYSTEM**

Option: B3580-23-000  
End Date: 9/6/02



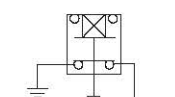


# **B3580-23-000 SYSTEM OPERATION**

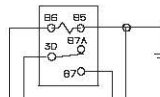
1. FOUR 7" AMBER LIGHTS AND FOUR 7" RED LIGHTS.
2. AMBER LIGHTS MANUALLY ENERGIZED BY ROCKER SWITCH LOCATED ON THE SWITCH PANEL.
3. RED LIGHTS AUTOMATICALLY ENERGIZED (WITH AMBER LIGHTS DE-ENERGIZED) WHEN BUS SERVICE DOOR IS OPENED.
4. RED LIGHTS AND STOP ARM ACTIVATED ONLY AFTER AMBER LIGHTS.
5. MASTER SWITCH IS LOCATED IN SWITCH PANEL.
6. RED AND AMBER LIGHT IN SWITCH CABINET TO INDICATE SYSTEM OPERATION.
7. SEPARATE RELAY FOR WARNING LIGHT SYSTEM.
8. NORTH CAROLINA SPECIFICATION.

DOOR SWITCH  
(SHOWN WITH DOOR OPEN)

POWER RELAY  
(SWITCH PANEL HARNESS)



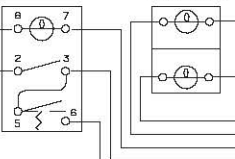
30 AMP  
FROM FUSE PNL.  
CC (BATT.)



MASTER/ACTIVATION  
SWITCH  
CONNECTOR #1  
(REAR VIEW)



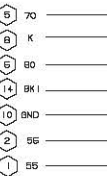
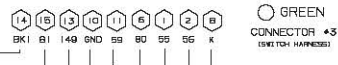
PILOT LIGHT



GREEN  
CONNECTOR #3  
(SWITCH PANEL HARNESS)

P/N 52003608

GREEN  
CONNECTOR #3  
(SWITCH HARNESS)

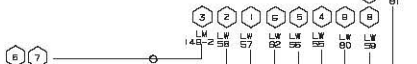


30 AMP  
FROM FUSE PNL.  
K (IGN.)

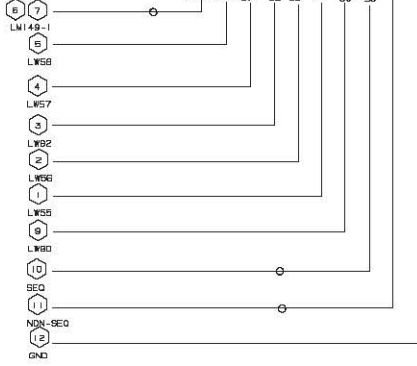
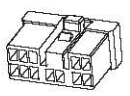
GREEN  
CONNECTOR #6  
(SWITCH PANEL HARNESS)

GREEN  
CONNECTOR #6  
(FLASHER HARNESS)

P/N 52005624

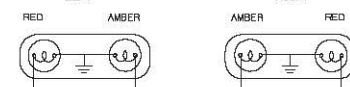


WELDON FLASHER



OPTION B3580-23-000  
MINOTOUR SRW, DRW

FRONT

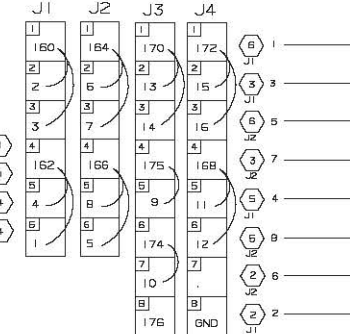


REAR

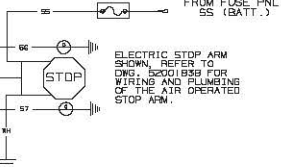


GREEN  
CONNECTOR #17  
(REAR MAIN HARNESS)

GREEN  
CONNECTOR #17  
(FRONT MAIN HARNESS)



TO E.S.I. LIGHT MODULE



ELECTRIC STOP ARM  
SHOWN REFER TO  
DWG. 52001858 FOR  
WIRING AND PLUMBING  
OF THE AIR OPERATED  
STOP ARM.

**52003658 D**

**EIGHT LIGHT WARNING  
SYSTEM**

Option: B3580-23-000  
End Date: 9/6/02



CONN	VENDOR	PART #	DESCRIPTION	QTY
1, 2, 3	CARLING	99916716001	SWITCH CONNECTOR	3
	PED	12015869	18-20 GA TERMINAL	2
	PED	12015870	14-16 GA TERMINAL	10
	PED	12084590	10-12 GA TERMINAL	0
3	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	10
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	0
	AMP	770023-1	15 POSITION CONNECTOR, PLUG.	1
RELAY	HELLA	87122	HOUSING-RELAY, 5 POSITION.	1
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	4
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	0

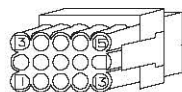
6.TAPE CONVOLUTE TO HARNESS AT ENDS.  
5.STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.  
4.REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.  
3.FULLY TAPE BREAKOUTS FOR 3"-2" SPACING OTHERWISE.  
2.TAG HARNESS FOR IDENTIFICATION.  
1.CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"

NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
202	16	WHITE/RED	SWITCH TO CHIME RELAY.
BK1	16	BLACK	FROM SWITCH TO WELDON RELAY (+).
80	16	GREEN	ACTIVATION SW (AMBER) TO FLASHER.
GND	16	WHITE	CHASSIS GROUND.
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+)
GN/JP	18	GREEN	GROUND, SWITCH LIGHT JUMPER (-).
55	18	YELLOW	WARNING LIGHT TO WELDON, AMBER.
56	18	RED	WARNING LIGHT TO WELDON, RED.
K	16	RED	12 V+ IGN. FROM FUSE PANEL.
203	16	WHITE/RED	OUTPUT FROM RELAY TO CHIME.
205	16	RED	OUTPUT TO STOP ARM SOLENOID.
82	14	BLUE	STOP ARM OUTPUT, FROM FLASHER.
57	18	RED	WARNING LIGHT TO WELDON, RED.
58	18	YELLOW	WARNING LIGHT TO WELDON, AMBER.
.	.	.	.

1	2	3
55	56	57
4	5	6
58	70	80
7	8	9
.	K	.
10	11	12
GND	.	82
13	14	15
.	BK1	.

GREEN  
CONNECTOR #3  
( TO SWITCH CABINET HARNESS)

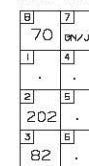


CONNECTOR #3

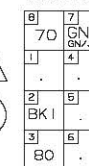
30 - 82  
85 - GND  
86 - 202  
87 - 202, 203  
87A - 205



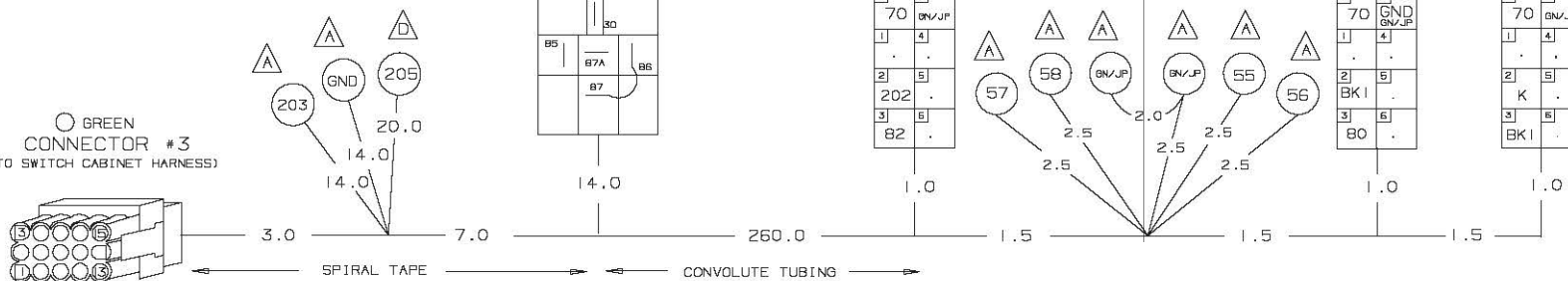
STOP ARM SWITCH  
CONNECTOR #3  
(REAR VIEW)



MOMENTARY ACTIVATION  
CONNECTOR #1  
(REAR VIEW)



CANCEL  
CONNECTOR #2  
(REAR VIEW)

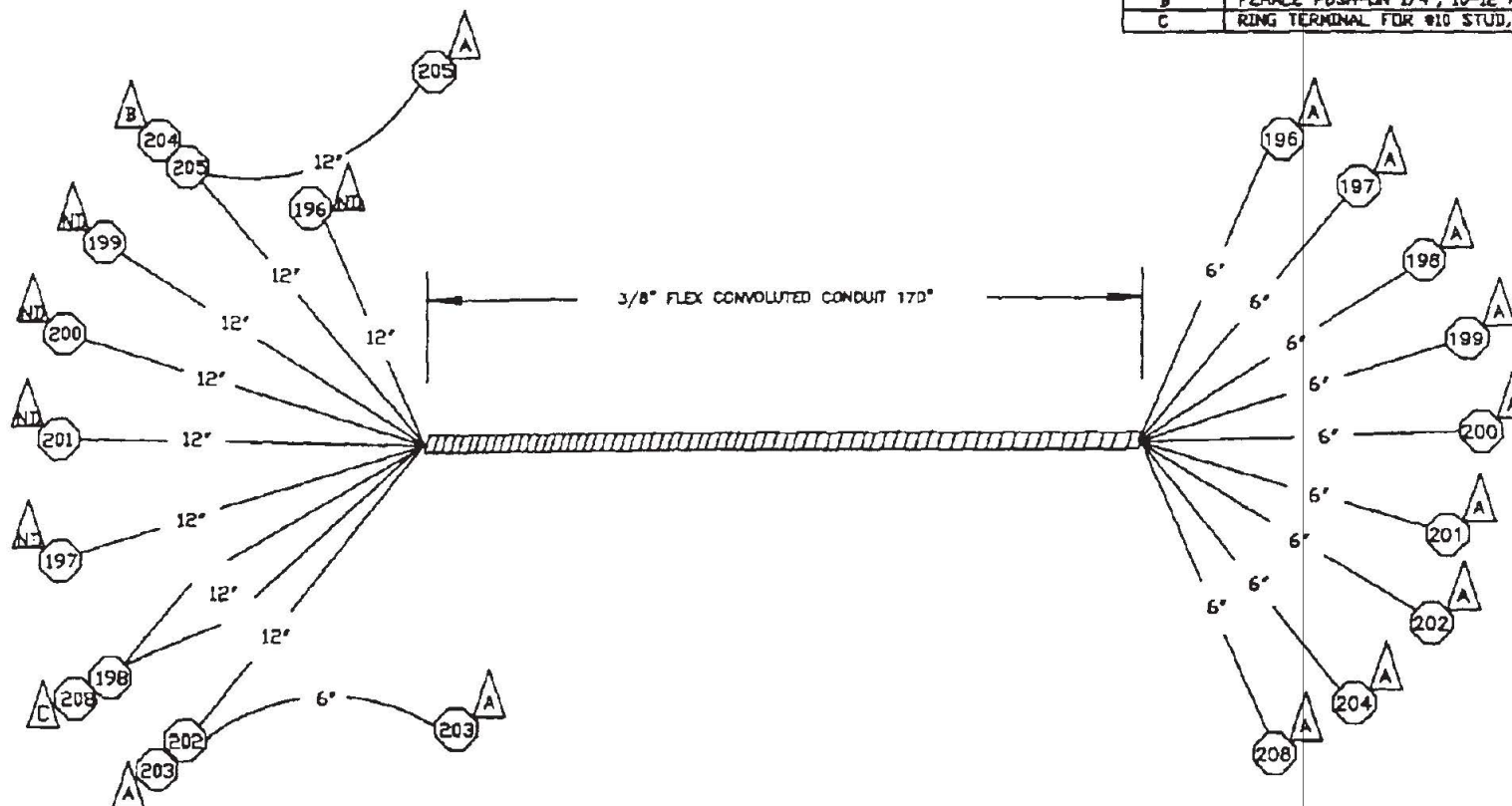


OPTION: B3580-24-000  
(SRW, DRW MODELS ONLY)

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	1
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	8
	VENDOR	PART #	DESCRIPTION	QTY

52003576 B

**HARNESS, EIGHT LIGHT WARNING SYSTEM**  
Option: B3580-24-000  
End Date: 9/6/02



TERMINAL	DESCRIPTION
A	FEMALE PUSH-ON 1/4", 14-16 AVG. INS.
B	FEMALE PUSH-ON 1/4", 10-12 AVG. INS.
C	RING TERMINAL FOR #10 STUD, 14-16 AVG. INS.

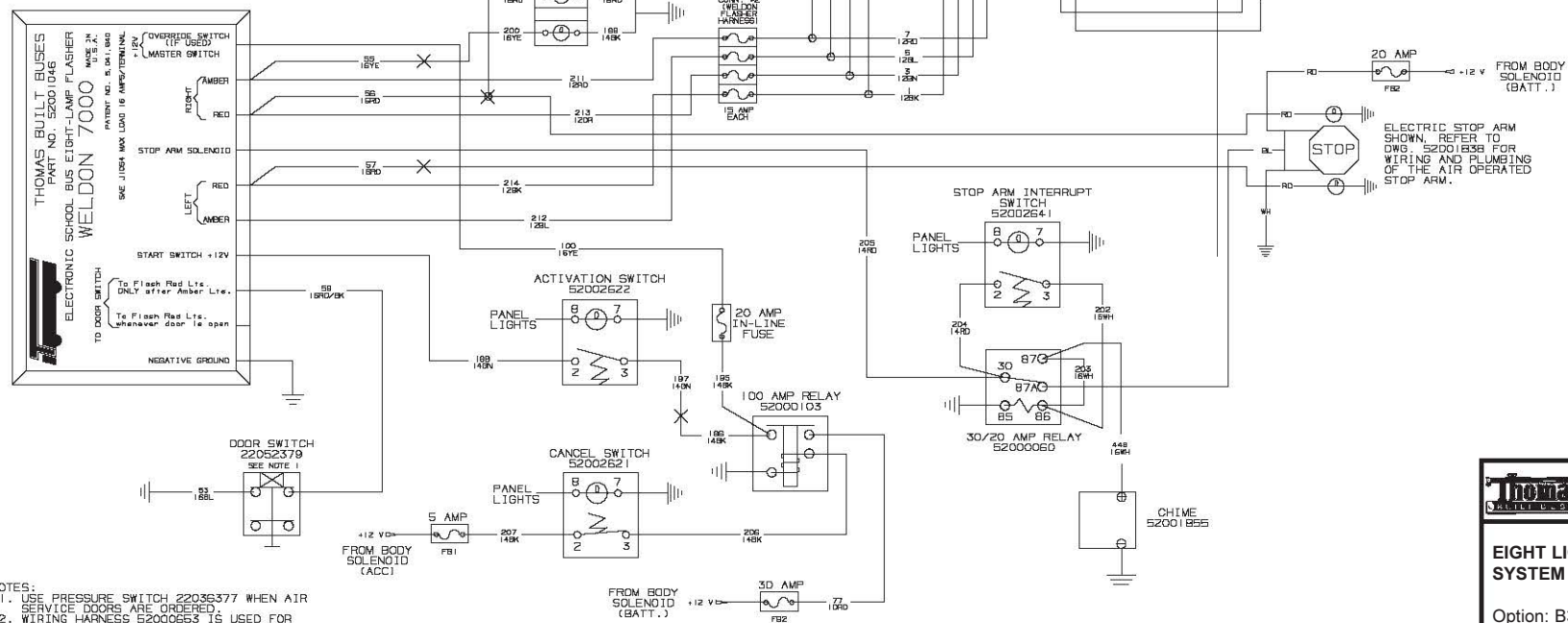
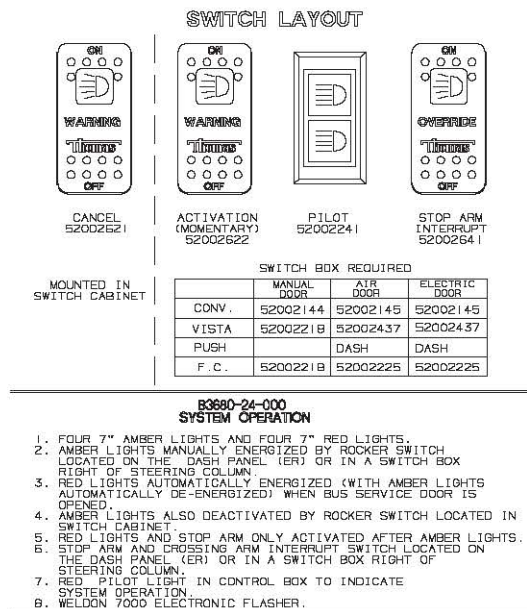
OPTION B3580-24

208	16	RED	PILOT LIGHT RED TO GROUND
205	14	RED	RELAY #30 TO STOP SIGN TERMINAL ON FLASHER
204	14	RED	INTERRUPT SWITCH TO RELAY #30
203	16	WHITE	RELAY #86 TO RELAY #87
202	16	WHITE	INTERRUPT SWITCH TO RELAY #86
201	16	RED	PILOT LIGHT RED TO FLASHER
200	16	YELLOW	PILOT LIGHT AMBER TO FLASHER
199	14	GREEN	AMBER LIGHT SWITCH TO START TERMINAL ON FLASHER
198	14	YELLOW	PILOT LIGHT AMBER TO GROUND
197	14	GREEN	FEED TO SWITCH
196	14	WHITE	PANEL LIGHTS
CIR.	GA.	COLOR	DESCRIPTION

NOTE: REFER TO DRAWING # 5200-1136 FOR HARNESS SPECIFICATIONS  
CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS W/PREFIX B ON ALL LEADS

<b>Thomas</b> SOLUTION PROVIDER	80520195 C
HARNESS, WARNING LIGHTS	
Option: B3580-24-000	





- NOTES:
- USE PRESSURE SWITCH 22036377 WHEN AIR SERVICE DOORS ARE ORDERED.
  - WIRING HARNESS 52000665 IS USED FOR WIRING INSIDE THE SWITCH CABINET.


52002528 B


**EIGHT LIGHT WARNING  
SYSTEM (VIRGINIA)**


Option: B3580-24-000

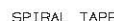
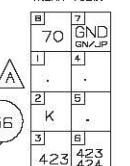
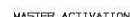
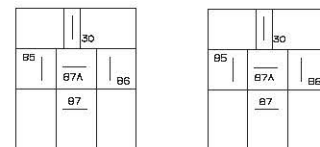


30 - 461  
85 - GND  
86 - 413  
87 - .

87A -  59

30 - 80, 80A  
85 - 59  
86 -  424  
87 - HH  
87A - .


 DIODE

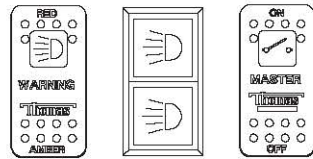


1	2	3
55	56	57
4	5	6
58	70	80
7	8	9
.	K	HH
10	11	12
GND	59	.
13	14	15
149	BK 1	.

4. STRIP INSULATION BACK 3/8" ON  
UNTERMINATED LEADS.
3. REFER TO DWG. #52001136 FOR HARNESS  
SPECIFICATIONS.
2. TAG HARNESS FOR IDENTIFICATION.
1. CIRCUIT NUMBERS TO BE STAMPED AT  
4" INTERVALS WITH THE PREFIX "B"  
ON ALL LEADS.
- NOTES:

OPTION: B3580-26-000  
(SRW, DRW MODELS ONLY)

	52003613 C
<b>HARNESS, EIGHT LIGHT WARNING SYSTEM</b>	
Option: B3580-26-000 End Date: 9/6/02	



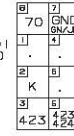
# **B3580-26-000 SYSTEM OPERATION**

1. REAR 7" AMBER LIGHTS AND FOUR 7" RED LIGHTS.
2. RED WARNING LIGHTS AND THE RED PILOT LIGHT ARE ENERGIZED WHEN ONE OF THE FOLLOWING OCCURS:
  - MASTER SWITCH "ON" - CONTROL SWITCH "OFF" - SERVICE DOOR OPEN - STOP ARM RETRACTED.
  - MASTER SWITCH "ON" - CONTROL SWITCH "AMBER" - SERVICE DOOR OPEN - STOP ARM RETRACTED.
  - MASTER SWITCH "ON" - CONTROL SWITCH "RED" - SERVICE DOOR CLOSED - STOP ARM EXTENDED.
3. AMBER LIGHTS ARE ENERGIZED WHEN THE SERVICE DOOR IS OPEN AND THE STOP ARM IS RETRACTED.
4. RED LIGHTS ARE ENERGIZED WHEN THE MASTER SWITCH IS "ON" AND THE STOP ARM IS EXTENDED.
5. AVAILABLE ALARM BELL WHEN THE MASTER SWITCH IS "ON" AND THE STOP ARM IS EXTENDED.
6. MASTER SWITCH "OFF" - SERVICE DOOR IS OPEN - STOP ARM IS RETRACTED.
7. MASTER SWITCH "ON" - SERVICE DOOR IS OPEN - STOP ARM IS EXTENDED.
8. REAR AND FOUR 7" RED LIGHTS.
9. WELDON 7000 ELECTRONIC FLASHER.
10. FLASHER SWITCH (ON).

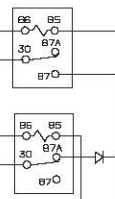
CONTROL SWITCH CONNECTOR #42 (REAR VIEW)



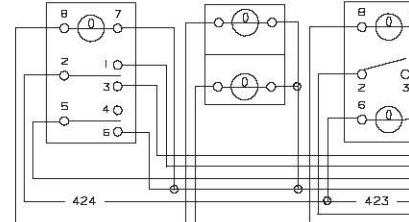
MASTER SWITCH CONNECTOR #1 (REAR VIEW)



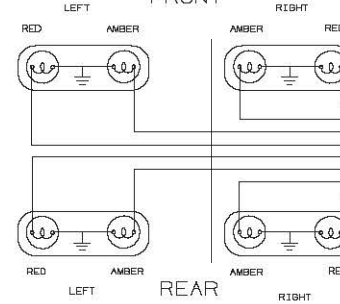
(2) POWER RELAYS (SWITCH HARNESS)



PILOT LIGHT

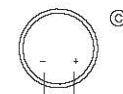


FRONT



REAR

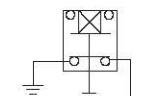
BUZZER  
P/N 52D04023



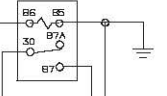
GREEN CONNECTOR #17 (REAR MAIN HARNESS)

GREEN CONNECTOR #17 (FRONT MAIN HARNESS)

DOOR SWITCH (SHOWN WITH DOOR OPEN)



POWER RELAY (SWITCH PANEL HARNESS)



GREEN CONNECTOR #3 (SWITCH PANEL HARNESS)



GREEN CONNECTOR #3 (SWITCH HARNESS)



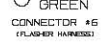
30 AMP FROM FUSE PNL. CC (BATT.)

30 AMP FROM FUSE PNL. K (IGN.)

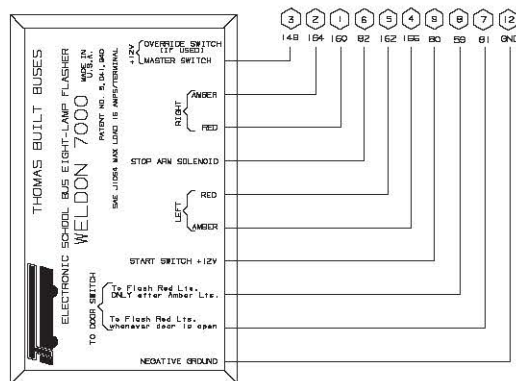
GREEN CONNECTOR #6 (SWITCH PANEL HARNESS)



GREEN CONNECTOR #6 (FLASHER HARNESS)



WELDON FLASHER



FLASHER P/N 22019369

\*\* SEE NOTE BELOW \*\*

TO E.S.I. LIGHT MODULE

OPTION B3580-26-000  
MINOTOUR SRW, DRW

NOTE:

DO NOT USE BREAKOUTS IN SWITCH CABINET HARNESS FOR STOP ARM LIGHTING OR SOLENOID. USE BREAKOUTS IN WARNING SWITCH HARNESS, RD, RD1, & 413.



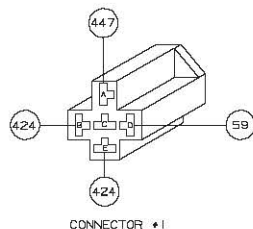
52003662 D

**EIGHT LIGHT WARNING SYSTEM**

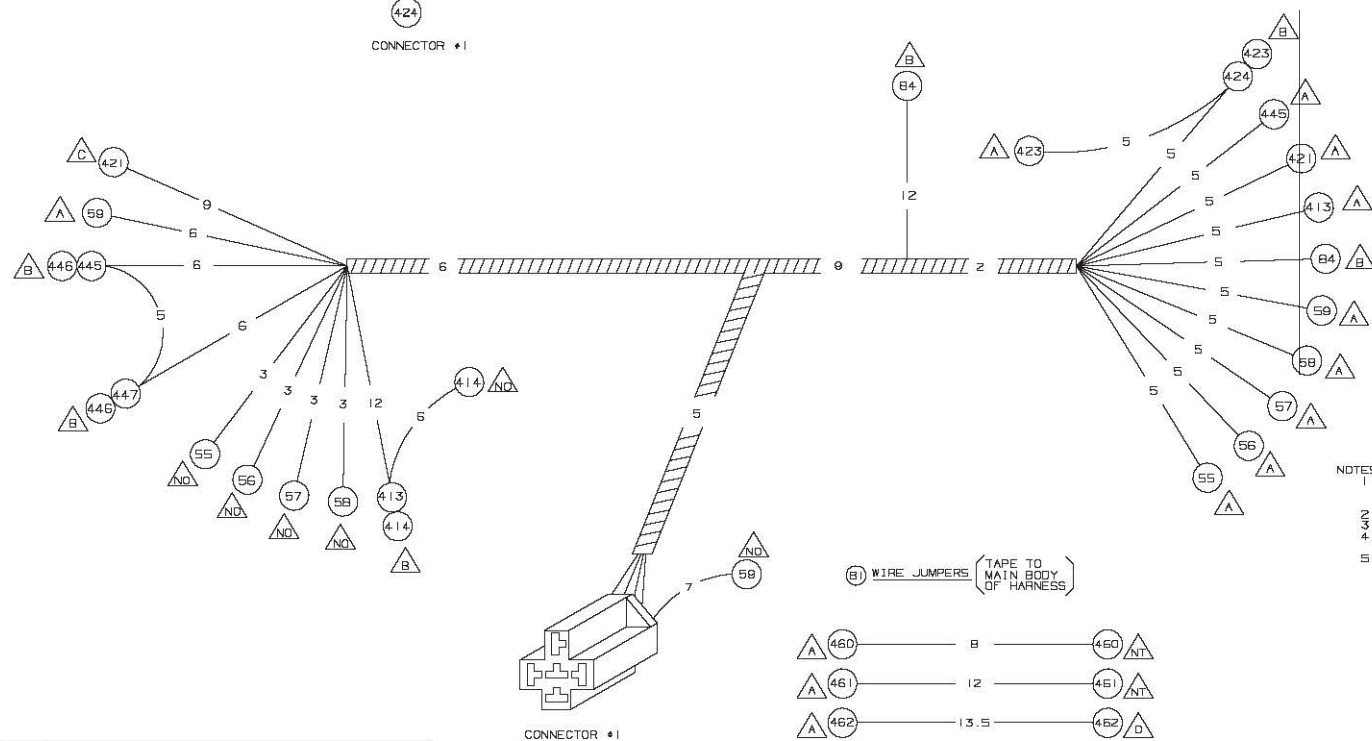
Option: B3580-26-000  
End Date: 9/6/02



CONNECTOR LIST				
CONN	VENDOR	PART NO.	DESCRIPTION	QTY.
I	CONTROL DESIGNS	BROS-W-H	HOUSING-RELAY, 5-POSITION	1
	INTERLOCK	JBC-1230-1	TERMINAL-FEMALE, 1/4", 14-16 AWG.	2
	INTERLOCK	JW-1330-2	TERMINAL-FEMALE, 1/4", (2)-16 AWG.	2



CIR	CONN-CAY.	GA	COLOR	DESCRIPTION
55	NONE	16	YELLOW	WARNING LIGHT PILOT LIGHT (AMBER)
56	NONE	16	RED	WARNING LIGHT PILOT LIGHT (RED)
57	NONE	16	RED	WARNING LIGHT PILOT LIGHT (RED)
58	NONE	16	YELLOW	WARNING LIGHT PILOT LIGHT (AMBER)
59	D	16	RED/BLACK	3 POS. SW. (4) TO DOOR SW. ON FLASHER TO RELAY (85) TO SW. ON CONTROLLER
84	NONE	12	WHITE	MASTER SWITCH TO FUSE PANEL (+12V)
413	NONE	16	RED	3 POSITION SWITCH (3) TO STOP SIGN FLASHER
414	NONE	16	RED	STOP SIGN FLASHER TO STOP SIGN
421	NONE	16	BLUE	3 POSITION SWITCH (5) TO GROUND
423	NONE	16	BLACK	3 POSITION SWITCH (2) TO MASTER SWITCH
424	B, E	16	BLACK	MASTER SWITCH TO DOOR SWITCH RELAY (30 & 86)
445	NONE	16	WHITE/BLACK	3 POSITION SWITCH (1) TO MASTER SWITCH ON FLASHER
446	NONE	16	WHITE/BLACK	MASTER SWITCH ON FLASHER TO START SWITCH ON FLASHER
447	A	16	GREEN	START SWITCH ON FLASHER TO DOOR SWITCH RELAY (87)
460	NONE	16	RED	MASTER SWITCH ON FLASHER TO STOP ARM BUZZER (+12V)
461	NONE	16	RED	STOP ARM SOLENOID ON FLASHER TO STOP ARM BUZZER RELAY TERM. 86
462	NONE	16	RED	STOP ARM BUZZER RELAY TERM. 30 (TO DIODE) TO DOOR SWITCH
463	NONE	16	WHITE	STOP ARM BUZZER RELAY TERM. 87A TO STOP ARM BUZZER GND
464	NONE	16	WHITE	STOP ARM BUZZER RELAY TERM. 85 TO GND



- NOTES:
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.
  2. TAG HARNESS FOR IDENTIFICATION.
  3. FULLY TAPE THIS HARNESS.
  4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
  5. STRIP INSULATION BACK 1/2" ON UNTERMINATED LEADS.

E	SPRING SPADE, *10 STUD, 14-16 AWG., INSULATED
D	BUTT SPLICE, INSULATED, 14-16 AWG.
C	RING TERMINAL, *10, 14-16 AWG.
B	FEMALE PUSH-ON, 1/4", 10-12 AWG.
A	FEMALE PUSH-ON, 1/4", 14-16 AWG.
TERM	DESCRIPTION

A 460	B	460	NT
A 461	12	461	NT
A 462	13.5	462	D
A 463	B	463	E
A 464	B	464	E

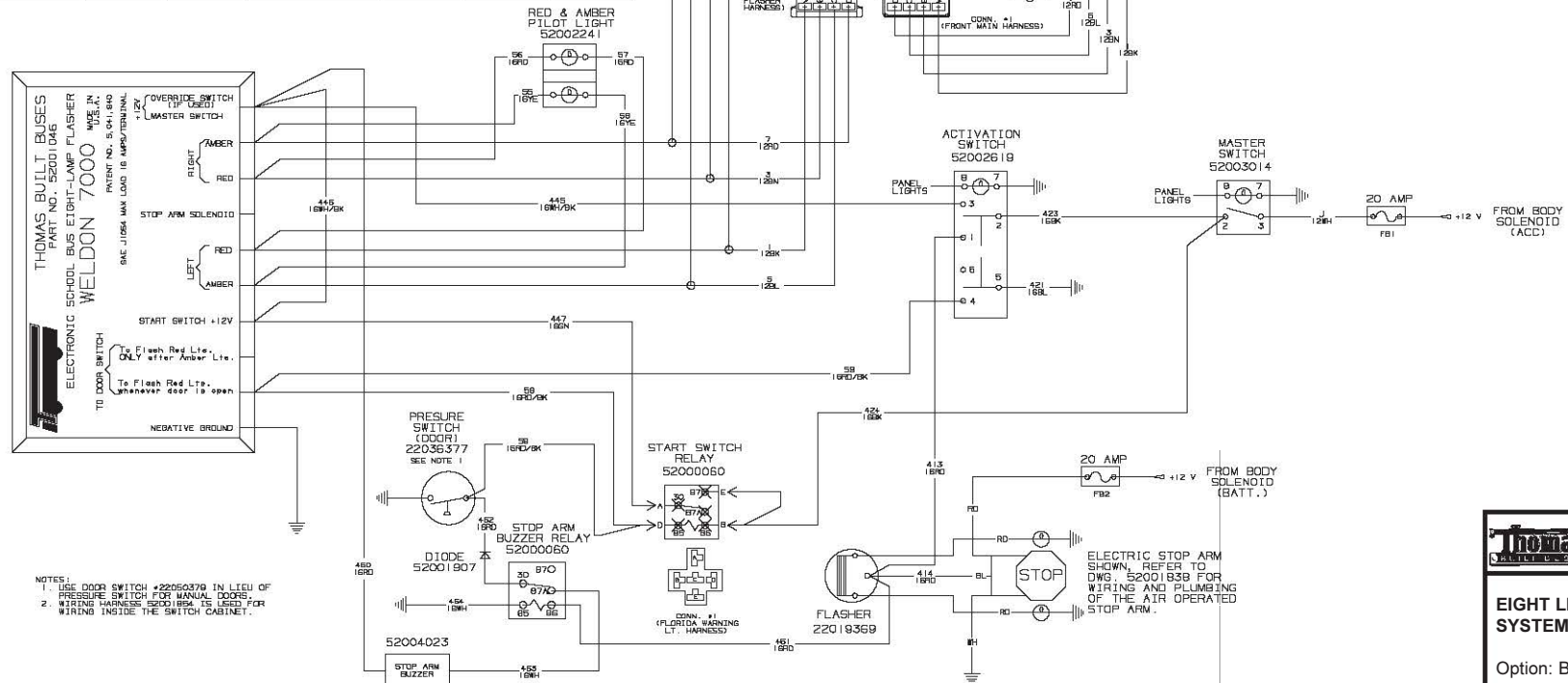
52001854 C

**HARNESS, WARNING LIGHT, EIGHT LIGHT, IN SWITCH CABINET (FLORIDA)**

WITH MASTER SWITCH, CONTROL SWITCH, AND SERVICE ODO IN THE FOLLOWING POSITIONS:

CONDITION OF STOP ARM(S), STOP ARM  
LIGHTS, AMBER WARNING LIGHTS AND  
RED WARNING LIGHTS MUST BE:

MASTER SWITCH SWITCH POSITION (ON OR OFF)		CONTROL SWITCH SWITCH POSITION (3 POSITION: OFF, AMBER, OR RED)		SERVICE DOOR POSITION	STOP ARMS, STOP ARMS, PILOT LIGHTS	AMBER WARNING AND PILOT LIGHTS	RED WARNING AND PILOT LIGHTS	AUDIBLE ALARM
1	ON	OFF	CLOSED	1 RETRACTED, OFF	OFF	OFF	OFF	OFF
2	ON	OFF	OPEN	2 RETRACTED, OFF	OFF	OFF	ON	ON
3	ON	AMBER	CLOSED	3 RETRACTED, OFF	ON	OFF	OFF	OFF
4	ON	AMBER	OPEN	4 RETRACTED, OFF	OFF	ON	ON	ON
5	ON	RED	CLOSED	5 EXTENDED, ON	OFF	ON	OFF	OFF
6	ON	RED	OPEN	6 EXTENDED, ON	OFF	ON	ON	ON
7	OFF	ANY POS.	ANY POS.	7 RETRACTED, OFF	OFF	OFF	OFF	OFF

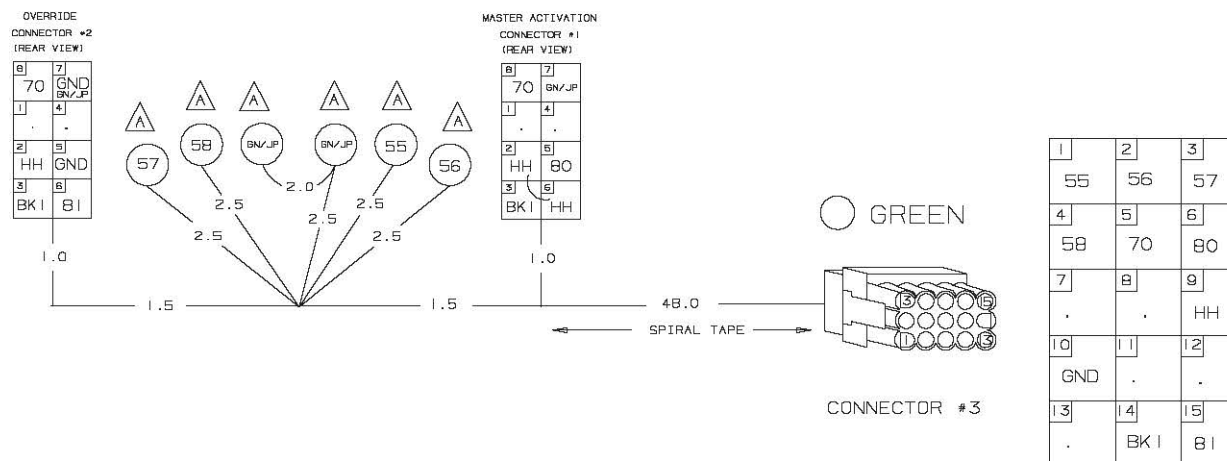


CONN	VENDOR	PART #	DESCRIPTION	QTY
1, 2	CARLING	99916716001	SWITCH CONNECTOR	2
	PED	12015869	18-20 GA TERMINAL	2
	PED	12015870	14-16 GA TERMINAL	8
	PED	12084590	10-12 GA TERMINAL	0
3	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	10
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	.
	AMP	770023-1	15 POSITION CONNECTOR, PLUG.	1
RELAY	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

5. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.  
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.  
3. FULLY TAPE BREAKOUTS FOR 3"-2" SPACING OTHERWISE.  
2. TAG HARNESS FOR IDENTIFICATION.  
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"

NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
HH	16	RED	12V+ BAT. FROM FUSE PANEL.
BK1	16	BLACK	FROM SWITCH TO WELDON RELAY (+).
80	16	GREEN	ACTIVATION SW (AMBER) TO FLASHER.
GND	16	WHITE	CHASSIS GROUND.
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+)
55	18	YELLOW	WARNING LIGHT TO WELDON, AMBER.
56	18	RED	WARNING LIGHT TO WELDON, RED.
GN/JP	18	GREEN	GROUND, SWITCH LIGHT JUMPER. (-)
81	16	BLUE/WHITE	TO WELDON, RED LIGHT ACTIVATE.
57	18	RED	WARNING LIGHT TO WELDON, RED.
58	18	YELLOW	WARNING LIGHT TO WELDON, AMBER.
.	.	.	.

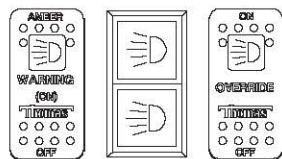


D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	6
	VENDOR	PART #	DESCRIPTION	QTY

OPTION: B3580-27-000  
(SRW, DRW MODELS ONLY)

52003615 B

**HARNESS, EIGHT LIGHT WARNING SYSTEM**  
Option: B3580-27-000  
End Date:9/6/02

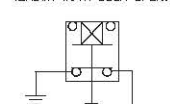


# B3580-27-000 SYSTEM OPERATION

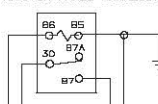
1. FOUR 7" AMBER LIGHTS AND FOUR 7" RED LIGHTS.
2. AMBER LIGHTS MANUALLY ENERGIZED BY HOOKER SWITCH LOCATED ON THE SWITCH PANEL.
3. RED LIGHTS AUTOMATICALLY ENERGIZED (WITH AMBER LIGHTS DE-ENERGIZED) WHEN BUS SERVICE DOOR IS OPENED.
4. RED LIGHTS AND STOP ARM ACTIVATED WHEN SERVICE DOOR IS OPENED.
5. MASTER SWITCH IS LOCATED IN SWITCH PANEL.
6. OVERRIDE SWITCH IN SWITCH PANEL TO FLASH RED LIGHTS AND EXTEND STOP ARM.
7. RED AND AMBER LIGHT IN SWITCH CABINET TO INDICATE SYSTEM OPERATION.
8. NOT AVAILABLE WITH OPTION B3580-21-000 MANUAL WARNING LIGHT ACTIVATION.
9. BELDON 7500 ELECTRONIC FLASHER.
10. CALIFORNIA DESCRIPTION.

DOOR SWITCH  
(SHOWN WITH DOOR OPEN)

POWER RELAY  
(SWITCH PANEL HARNESS)



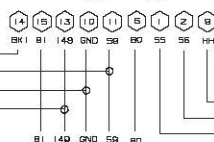
30 AMP  
FROM FUSE PNL.  
CC (BATT.)



GREEN  
CONNECTOR #3  
(SWITCH PANEL HARNESS)

P/N 52003615

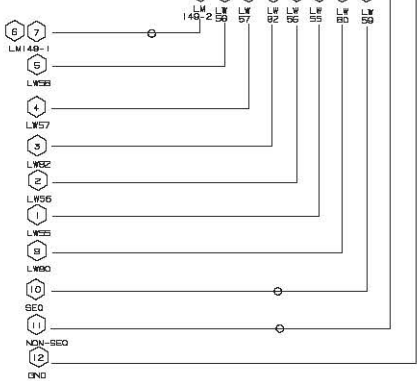
GREEN  
CONNECTOR #3  
(SWITCH PANEL HARNESS)



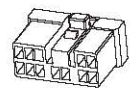
GREEN  
CONNECTOR #5  
(SWITCH PANEL HARNESS)

GREEN  
CONNECTOR #6  
(FLASHER HARNESS)

P/N 52005624



WELDON FLASHER



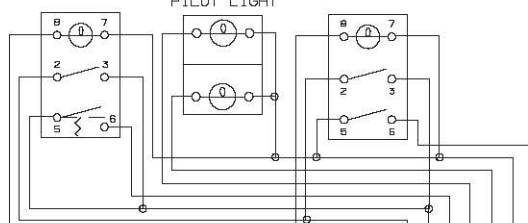
MASTER  
SWITCH  
CONNECTOR #1  
(REAR VIEW)



OVERRIDE  
SWITCH  
CONNECTOR #2  
(REAR VIEW)



PILOT LIGHT



LEFT FRONT RIGHT

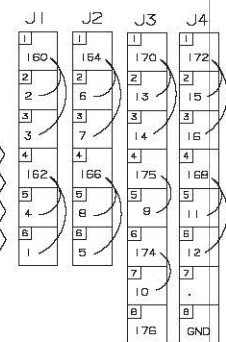
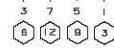


REAR



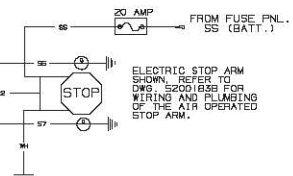
GREEN  
CONNECTOR #17  
(REAR MAIN HARNESS)

GREEN  
CONNECTOR #17  
(FRONT MAIN HARNESS)



TO E.S.I. LIGHT MODULE

OPTION B3580-27-000  
MINDTOUR SRW, DRW



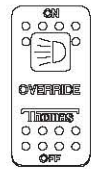
ELECTRIC STOP ARM  
SHOWN. REFER TO  
DWG. 52001658 FOR  
WIRING AND PLUMBING  
OF THE AIR OPERATED  
STOP ARM.

52003664 D

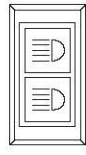
**EIGHT LIGHT WARNING  
SYSTEM**

Option: B3580-27-000  
End Date: 9/6/02

## SWITCH LAYOUT



OVERRIDE  
52003023



PILOT  
52002241



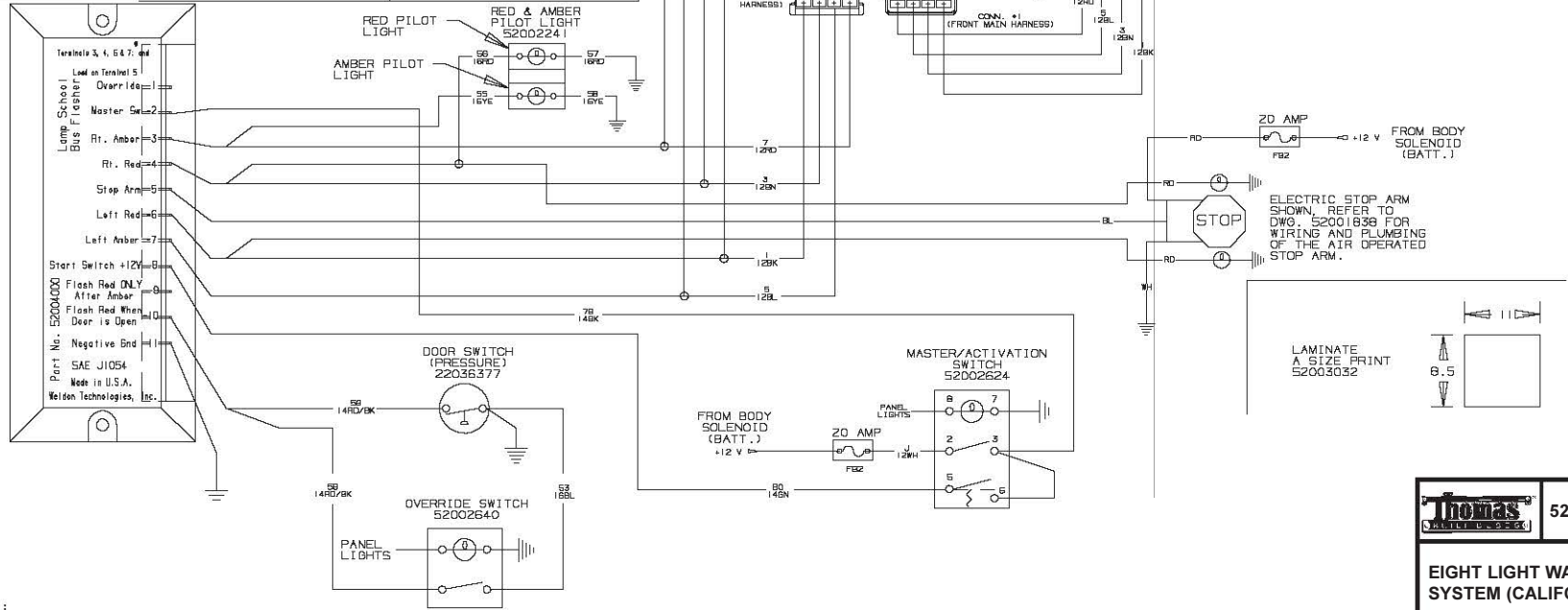
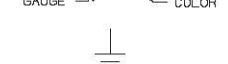
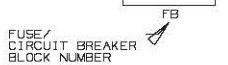
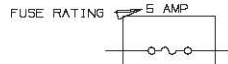
MASTER/  
ACTIVATION  
52003015

## B3580-27-000 SYSTEM OPERATION

1. FOUR 7" AMBER LIGHTS AND FOUR 7" RED LIGHTS.
2. AMBER LIGHTS MANUALLY ENERGIZED BY ROCKER SWITCH LOCATED ON THE SWITCH PANEL.
3. RED LIGHTS AUTOMATICALLY ENERGIZED (WITH AMBER LIGHTS AUTOMATICALLY DE-ENERGIZED) WHEN BUS SERVICE DOOR IS OPENED.
4. RED LIGHTS AND STOP ARM ACTIVATED WHENEVER SERVICE DOOR IS OPENED (NONSEQUENTIAL).
5. MASTER SWITCH LOCATED IN SWITCH PANEL.
6. OVERRIDE SWITCH IN SWITCH PANEL TO FLASH RED LIGHTS AND EXTEND STOP ARM.
7. RED AND AMBER PILOT LIGHT IN SWITCH CABINET TO INDICATE SYSTEM OPERATION.
8. WELDON 7000 ELECTRONIC FLASHER.

## COLOR & SYMBOLS LEGEND

RD-RED  
BR-BROWN  
GN-GREEN  
YE-YELLOW  
LT-LIGHT  
WH-WHITE  
BL-BLUE  
BK-BLACK  
OR-ORANGE  
PU-PURPLE  
DK-DARK  
J-JUMPER



- NOTES:
1. USE PUSH BUTTON SWITCH 22052379 WHEN MANUAL SERVICE DOORS ARE ORDERED.
  2. WIRING HARNESS 52001870 IS USED FOR WIRING INSIDE THE SWITCH CABINET.



**52002554 E**

**EIGHT LIGHT WARNING  
SYSTEM (CALIFORNIA)**

Option: B3580-27-000

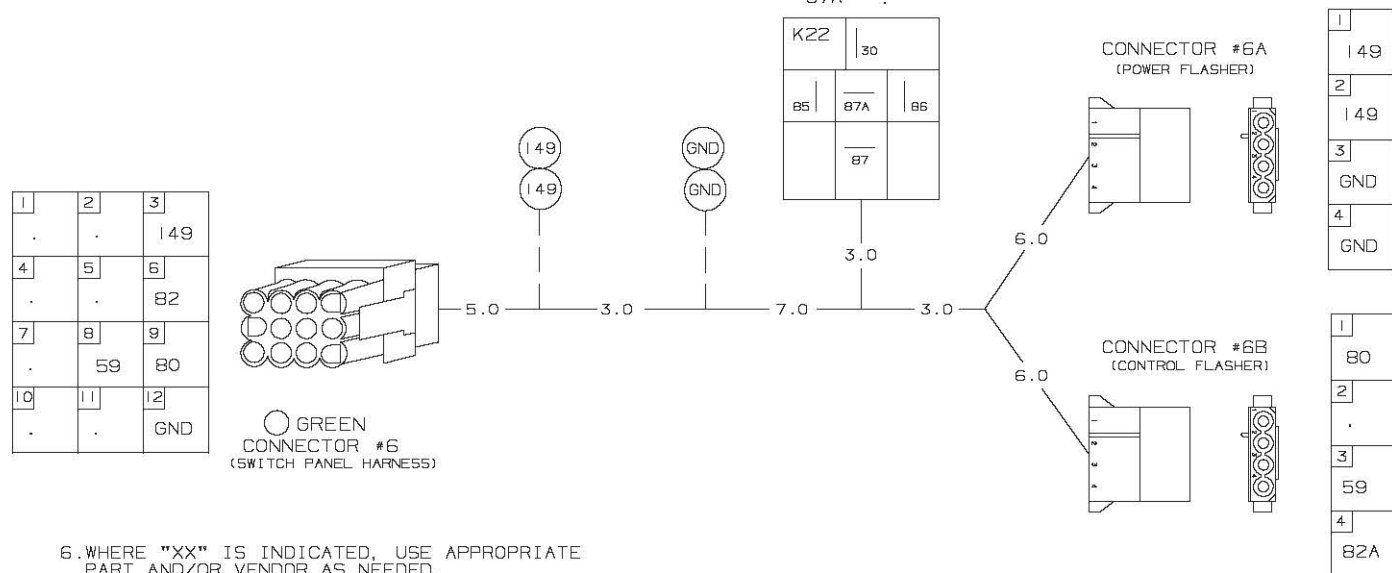


CONN	VENDOR	PART NO.	DESCRIPTION	QTY.
6A, 6B	AMP	61117-1	14-20 GA. TERMINAL RECEPTICAL.	X
	AMP	1-480424-0	4 POSITION CONNECTOR PLUG.	X
6	XX	XX	14-16 GA. TERMINAL RECEPTICAL.	X
	AMP	770022-1	12 POSITION CONNECTOR PLUG.	X
RELAY BLOCK	HELLA	87122	HOUSING-RELAY, 5 POSITION.	X
	XX	XX	TERMINAL-FEMALE, 1/4", 14-16 GA.	X

LEAD	AWG	COLOR	DESCRIPTION
59	14	RED/BLACK	DOOR SIGNAL (GND) TO FLASHER
80	14	GREEN	ACTIVATION SW. TO FLASHER.
82	14	BLUE	FEED TO STOP ARM SOLENOID.
82A	14	BLUE	FEED TO STOP ARM RELAY.
149	14	BLACK	FLASHER POWER.
GND	14	WHITE	FLASHER GROUND.
.	.	.	.

STOP SIGN

30 - 149  
85 - GND  
86 - 82A  
87 - 82  
87A - .



- 6.WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
  - 5.WHERE "X" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEEDED FOR TERMINATION.
  - 4.STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
  - 3.REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
  - 2.TAG HARNESS FOR IDENTIFICATION.
  - 1.CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"
- NOTES: ON ALL LEADS.

OPTION: B3580-31-000  
(SRW, DRW MODELS ONLY)

<b>Thomas</b> SOLUTIONS	<b>52003845 B</b>
<b>HARNESS, CONTROL &amp; POWER, WHELEN STROBE WARNING SYSTEM</b>	

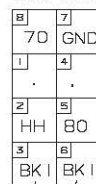


CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLING	99916716001	SWITCH CONNECTOR	1
	PED	12015869	18-20 GA TERMINAL	2
	PED	12015870	14-16 GA TERMINAL	3
	PED	12084590	10-12 GA TERMINAL	0
3	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	5
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	.
	AMP	770023-1	15 POSITION CONNECTOR, PLUG.	1
RELAY	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

4.REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.  
3.FULLY TAPE BREAKOUTS FOR 3"-  
2" SPACING OTHERWISE.  
2.TAG HARNESS FOR IDENTIFICATION.  
1.CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"  
NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
HH	16	RED	12V+ BAT. FROM FUSE PANEL.
BK1	18	BLACK	FROM SWITCH TO WHELEN RELAY (+).
80	16	GREEN	ACTIVATION SW (AMBER) TO FLASHER.
GND	16	WHITE	CHASSIS GROUND.
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+)
.	.	.	.
.	.	.	.

MASTER ACTIVATION  
CONNECTOR #1  
(REAR VIEW)

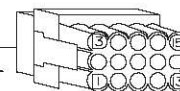


1.0

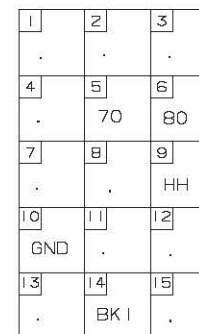
48.0

SPIRAL TAPE

GREEN




CONNECTOR #3



D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEP., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	.
	VENDOR	PART #	DESCRIPTION	QTY

OPTION: B3580-31-000  
(SRW, DRW MODELS ONLY)

	52003844 A
HARNESS, STROBE EIGHT LIGHT WARNING SYSTEM	
Option: B3580-31-000	



[illegible]

**STOP SIGNS &  
CROSSING ARMS  
SECTION**

CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLING	99916716001	SWITCH CONNECTOR	1
	PED	12015869	18-20 GA TERMINAL	4
	PED	12015870	14-16 GA TERMINAL	.
5	AMP	770005-1	14-20 GA. TERMINAL, PIN.	4
	AMP	770003-3	10-12 GA. TERMINAL, PIN.	.
	AMP	770027-1	6 POSITION CONNECTOR, CAP.	1
RELAY KI	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

5. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.  
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.  
3. FULLY TAPE BREAKOUTS FOR 3"-2" SPACING OTHERWISE.  
2. TAG HARNESS FOR IDENTIFICATION.  
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"  
NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
149A	18	BLACK	FLASHER POWER ON SIGNAL FEED.
GN/JP	18	GREEN	SWITCH LIGHT GROUND.
70	18	WHITE/BLACK	SWITCH LIGHT FEED (+).
BK2	18	BLACK/YELLOW	TO CROSSING ARM RELAY (+ SIGNAL).

CROSSING ARM  
DEACTIVATION  
52003772

(REAR VIEW)

8	7
70	GN/JP
1	4
.	.
2	5
149A	.
3	6
BK2	.

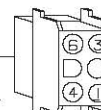
1.0

48.0

SPIRAL TAPE


○ RED  
CONNECTOR #5  
(CROSSING ARM DEACTIVATION)

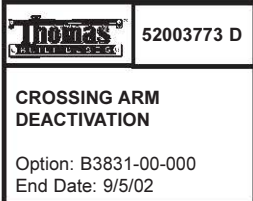
1	2	3
BK2	149A	.
4	5	6
70	GN/JP	.



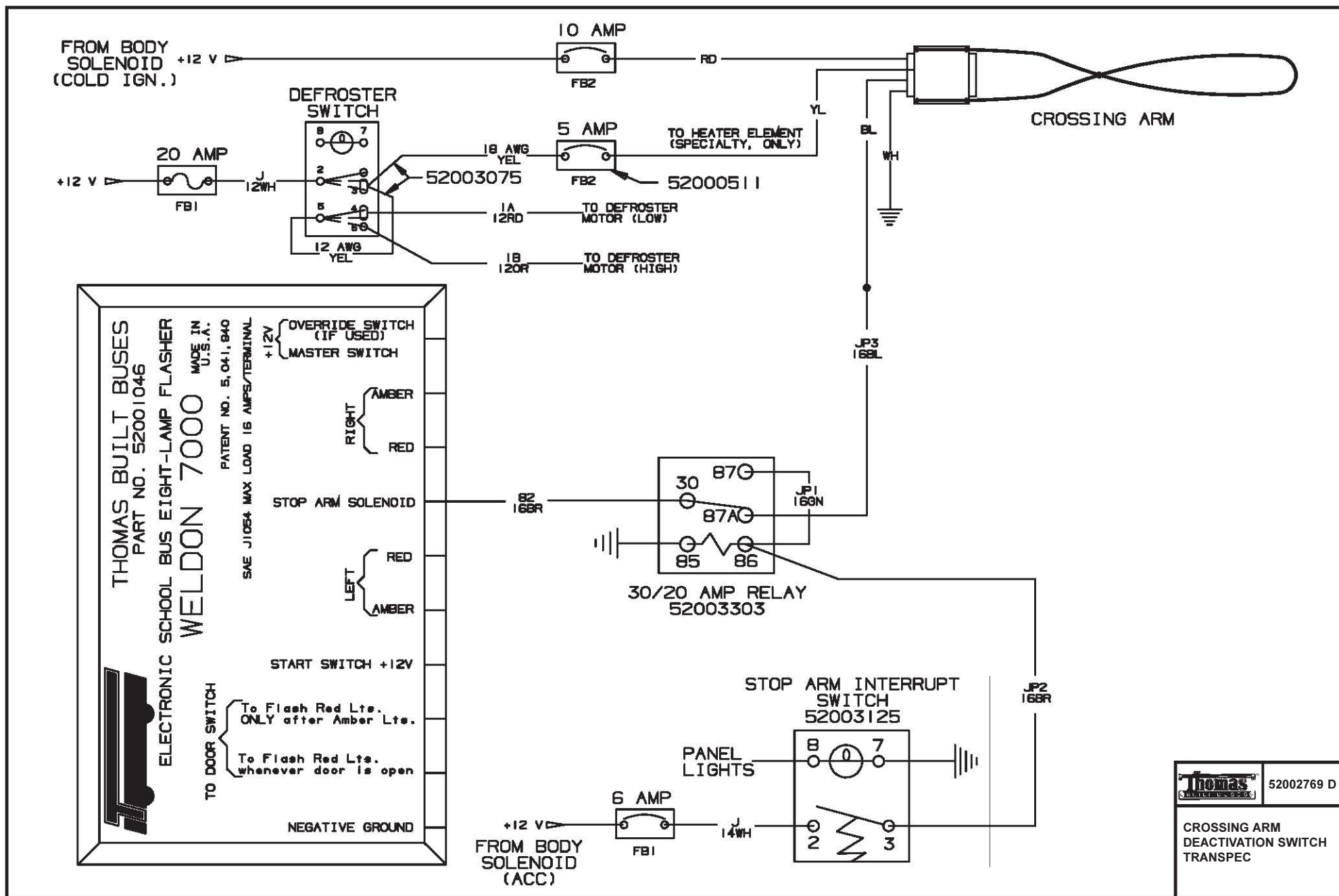
CROSSING ARM DEACTIVATION  
OPT. B3831-00-000, SRW, DRW

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECP., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	.
	VENDOR	PART #	DESCRIPTION	QTY

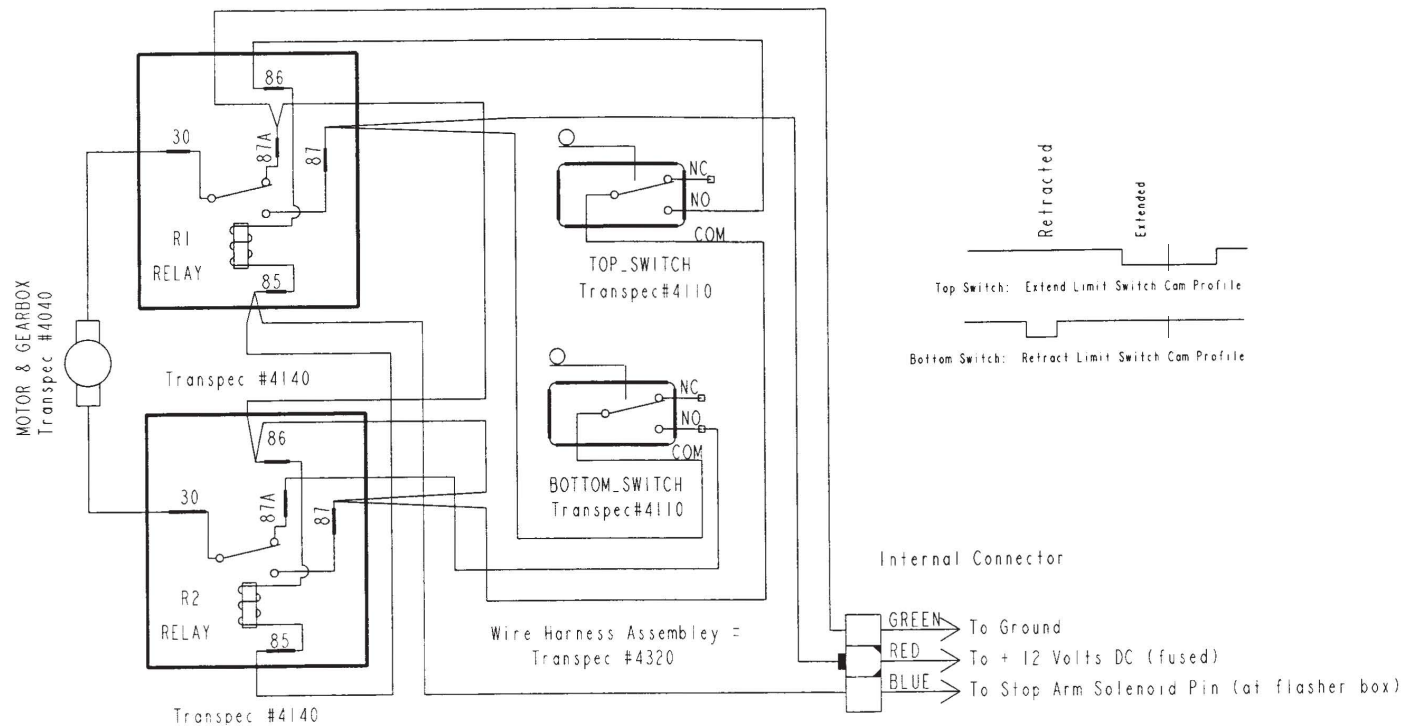
	52003771 B
HARNESS, CROSSING ARM DEACTIVATION	
Option: B3831-00-000 End Date: 9/5/02	







<b>Thomas</b> SCHOOL BUS EQUIPMENT	52002769 D
<b>CROSSING ARM DEACTIVATION SWITCH TRANSPEC</b>	



- NOTES:
- 1) MATERIAL:VENDOR PART# STOP AND CROSSING ARM CIRCUIT
  - 2) BLANK SIZE:N/A
  - 3) CALCULATED WEIGHT:N/A
  - 4) BURR REQUIREMENT:N/A
  - 5) FINISH:N/A
  - 6) COLOR:N/A
  - 7) TENSILE AND/OR IMPACT STRENGTH:N/A
  - 8) HIGH/LOW TEMPERATURE PERFORMANCE:N/A
  - 9) SURFACE GRAIN TEXTURE:NA/

<b>Thomas</b> SOLUTIONS	<b>52002845 A</b>
<b>STOP AND CROSSING ARM</b>	

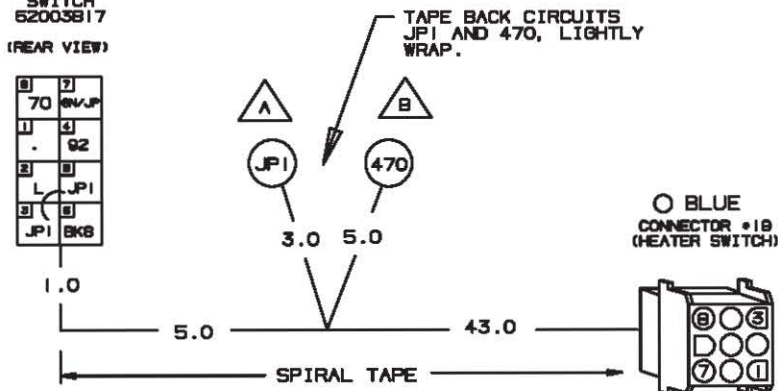
[illegible]

**HEATER  
SECTION**

CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLING	88816716001	SWITCH CONNECTOR	1
	PED	XX	18-20 GA TERMINAL	X
	PED	XX	14-16 GA TERMINAL	X
	PED	XX	10-12 GA. TERMINAL	X
18	AMP	XX	14-20 GA. TERMINAL, PIN.	X
	AMP	XX	10-12 GA. TERMINAL, PIN.	X
	AMP	770028-1	8 POSITION CONNECTOR, CAP.	1

LEAD #	AWG	COLOR	DESCRIPTION
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+).
GN/JP	18	GREEN	SWITCH PANEL LIGHTS (-).
BKB	16	BLACK	FRONT HEATER TRIGGER (HIGH), RELAY K11.
Q2	14	WHITE	FRONT HEATER FEED, LOW.
L	12	RED	FUSE PANEL (IGN.) TO HEATER SWITCH.
470	14	ORANGE	CROSSING/STOP ARM HEATER POWER FEED.
JP1	14	BLUE	JUMPER FOR HEATED X-ING/STOP ARM.
.	.	.	.

CONN. #1  
FRONT HEATER  
SWITCH  
52003817  
(REAR VIEW)



1	2	3
BKB	.	70
4	5	6
GN/JP	.	92
7	8	9
L	.	470

1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.
2. TAG HARNESS FOR IDENTIFICATION.
3. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
5. USE WIRE TIES TO HOLD HARNESS WHERE NEEDED, MINIMUM AMOUNT AND SIZE.
6. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
7. WHERE "X" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEEDED FOR TERMINATION.
8. SPIRAL TAPE SPACING IS TO BE ONE INCH.

NOTES:

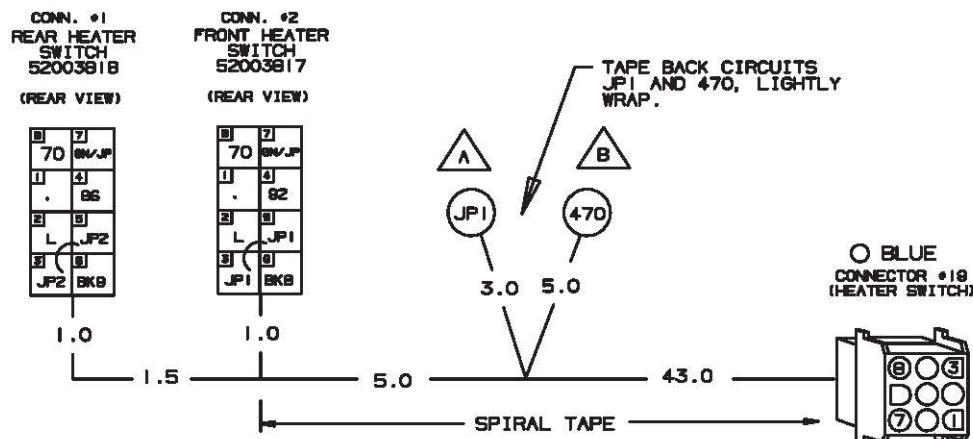
## HEATER SWITCH, FRONT

B	XX	XX	MALE RECEPT., 1/4", 14-16 GA.	X
A	XX	XX	FEMALE FAST-ON, 1/4", 14-16 GA.	X
	VENDOR	PART #	DESCRIPTION	QTY

<b>Thomas</b> SANTALINI	52003796 C
HARNESS, FRONT HEATER SWITCH	
End Date: 9/5/02	

CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLINS	88816718001	SWITCH CONNECTOR	2
	PED	XX	18-20 GA TERMINAL	X
	PED	XX	14-16 GA TERMINAL	X
	PED	XX	10-12 GA. TERMINAL	X
18	AMP	XX	14-20 GA. TERMINAL, PIN.	X
	AMP	XX	10-12 GA. TERMINAL, PIN.	X
	AMP	770028-1	8 POSITION CONNECTOR, CAP.	1

LEAD #	AWG	COLOR	DESCRIPTION
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+).
GN/JP	18	GREEN	SWITCH PANEL LIGHTS (-).
BK8	16	BLACK	FRONT HEATER TRIGGER (HIGH), RELAY K11.
82	14	WHITE	FRONT HEATER FEED, LOW.
L	12	RED	FUSE PANEL (IGN.) TO HEATER SWITCH.
470	14	ORANGE	CROSSING ARM HEATER POWER FEED.
JP1	14	BLUE	SWITCH JUMPER.
BK9	16	BLACK	REAR HEATER TRIGGER (HIGH), RELAY K12.
86	14	RED	REAR HEATER FEED, LOW.
JP2	16	BLACK	SWITCH JUMPER.
.	.	.	.



1	2	3
BK8	BK9	70
4	5	6
GN/JP	86	82
7	8	8
L	.	470

1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.
2. TAG HARNESS FOR IDENTIFICATION.
3. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
4. REFER TO DWS. #52001136 FOR HARNESS SPECIFICATIONS.
5. USE WIRE TIES TO HOLD HARNESS WHERE NEEDED, MINIMUM AMOUNT AND SIZE.
6. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
7. WHERE "X" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEEDED FOR TERMINATION.
8. SPIRAL TAPE SPACING IS TO BE ONE INCH.

NOTES:

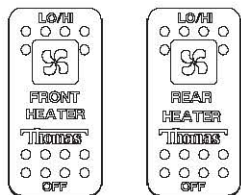
## HEATER HARNESS, FRONT AND REAR

B	XX	XX	MALE RECEPT., 1/4", 14-16 GA.	X
A	XX	XX	FEMALE FAST-ON, 1/4", 14-16 GA.	X
	VENDOR	PART #	DESCRIPTION	QTY

<b>Thomas</b> SOLUTIONS	52003798 B
CROSSING ARM DEACTIVATION	
Option: B3831-00-000 End Date: 9/5/02	



# SWITCH LAYOUT



FRONT HEATER CONNECTOR #1 (REAR VIEW)



REAR HEATER CONNECTOR #2 (REAR VIEW)



P/N 52003796 (FRONT ONLY)  
P/N 52003797 (REAR ONLY)  
P/N 52003798 (2 FRONT HEATERS, 2 REAR HEATERS, OR ANY COMBINATION OF FRONT AND REAR)

NOTE:

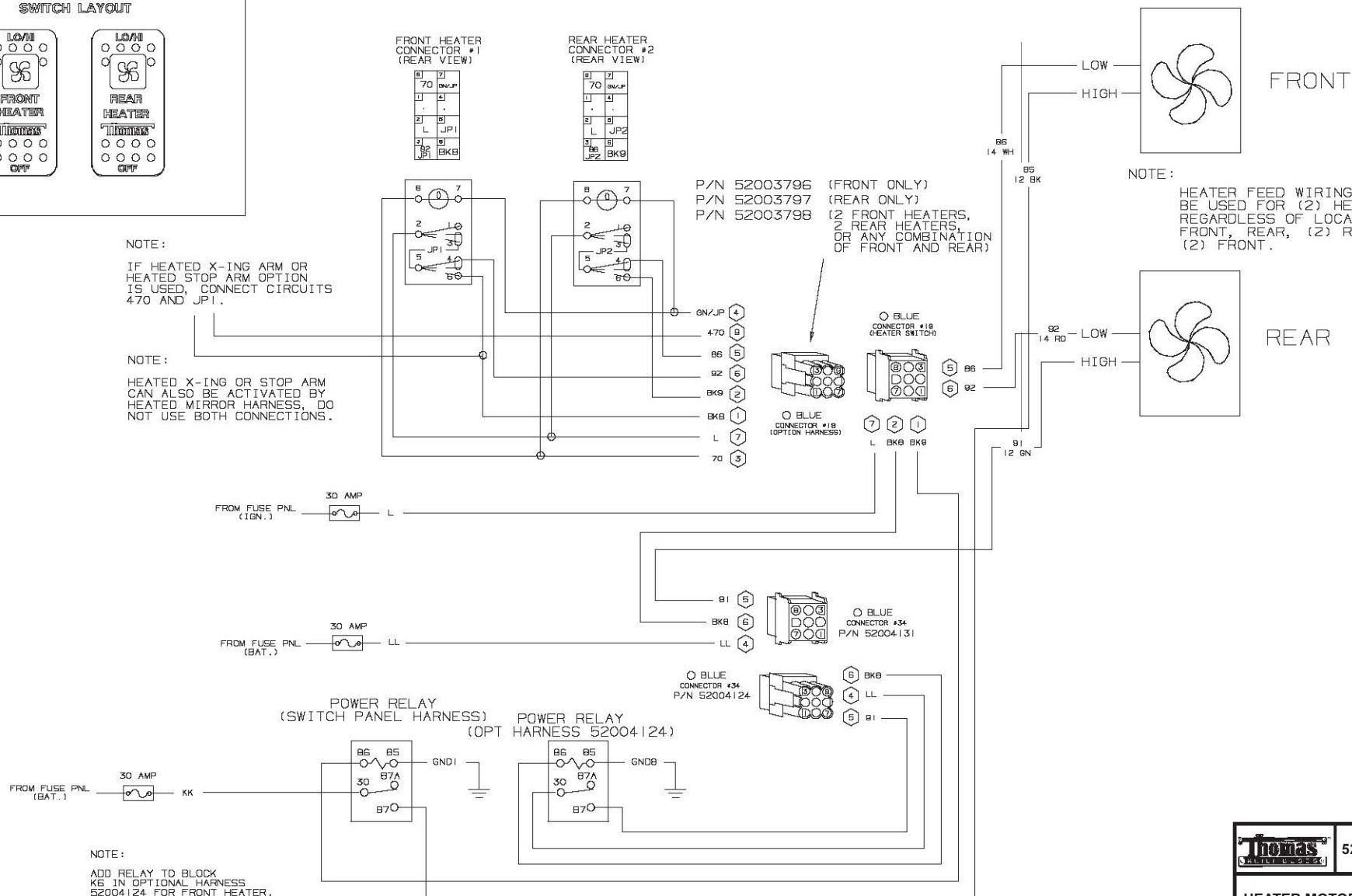
IF HEATED X-ING ARM OR HEATED STOP ARM OPTION IS USED, CONNECT CIRCUITS 470 AND JP1.

NOTE:

HEATED X-ING OR STOP ARM CAN ALSO BE ACTIVATED BY HEATED MIRROR HARNESS, DO NOT USE BOTH CONNECTIONS.

NOTE:

HEATER FEED WIRING CAN BE USED FOR (2) HEATERS REGARDLESS OF LOCATION, FRONT, REAR, (2) REAR OR (2) FRONT.



NOTE:

ADD RELAY TO BLOCK K6 IN OPTIONAL HARNESS 52004124 FOR FRONT HEATER. ADD RELAY TO BLOCK K7 IN PANEL HARNESS 52003581 FOR REAR HEATER ONLY. ADD BOTH FOR FRONT AND REAR HEATERS.

OPTION: B4120-XX-XXX

	52003816 E
HEATER MOTOR	
End Date: 9/5/02	

CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLING	99916716001	SWITCH CONNECTOR	1
	PED	12018660	18-20 GA TERMINAL	2
	PED	12018670	14-16 GA TERMINAL	4
	PED	12084590	10-12 GA. TERMINAL	-
8	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	5
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	-
	AMP	770020-1	6 POSITION CONNECTOR, PLUG.	1
	HELLA	87122	HOUSING-RELAY, 6 POSITION.	-
RELAY K1	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	-
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	-

LEAD #	AWG	COLOR	DESCRIPTION
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+).
GN/JP	18	GREEN	SWITCH PANEL LIGHTS (-).
73A	14	RED	DASH FAN LOW SPEED FEED.
73B	14	ORANGE	DASH FAN HIGH SPEED FEED.
8	14	RED	FUSE PANEL (IGN.) TO DASH FAN SWITCH CONN. #8.
.	.	.	.

CONN. #1  
DEFROSTER FAN  
SWITCH  
52003133  
(REAR VIEW)

70	GN/JP
.	.
8	73A
73A	73B

1.0

48.0

SPIRAL TAPE

BLUE  
CONNECTOR #8  
(FAN SWITCH HARNESS)

1	2	3
G	73A	.
4	5	6
70	GN/JP	73B

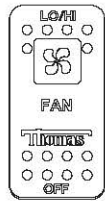
5. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
  4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
  3. FULLY TAPE BREAKOUTS FOR 3"-2" SPACING OTHERWISE.
  2. TAG HARNESS FOR IDENTIFICATION.
  1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"
- NOTES: ON ALL LEADS.

## DEFROSTER FAN HARNESS OPTION B2160-08-000

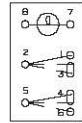
D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	.
	VENDOR	PART #	DESCRIPTION	QTY

<b>Thomas</b> SANTA CRUZ	52003803 B
HARNESS, DEFROST FAN SWITCH	
End Date: 9/5/02	

# SWITCH LAYOUT

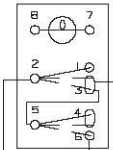


FAN SWITCH

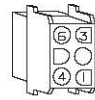


CIRCUIT

FAN SWITCH  
CONNECTOR #8  
(REAR VIEW)

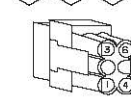


BLUE  
CONNECTOR #8  
(SWITCH CABINET HARNESS)



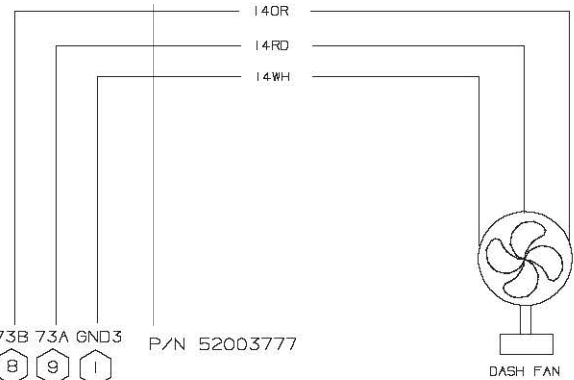
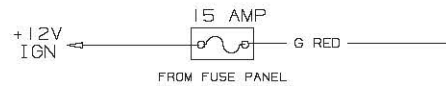
G 73B 73A

G 73B 73A



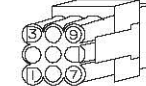
BLUE  
CONNECTOR #8  
(SWITCH HARNESS)

P/N 52003803

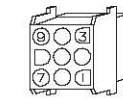


P/N 52003777

GREEN  
CONNECTOR #11  
(BODY-CHASSIS  
INTERFACE HARNESS)



GREEN  
CONNECTOR #11  
(SWITCH CABINET HARNESS)



73A 73B GND3


14RD

14OR

14WH

GND3

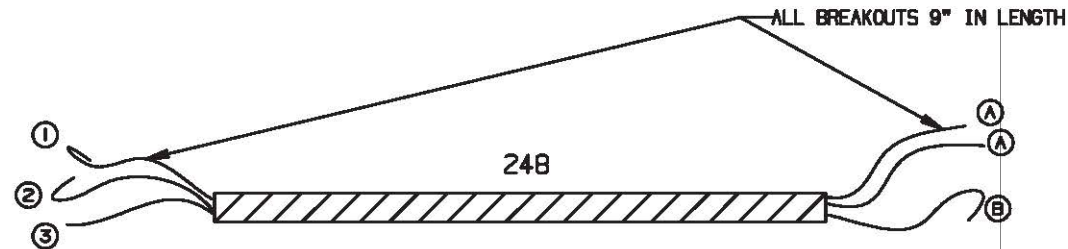
OPTION: B2160-08-000

	<b>52003838 C</b>
<b>DEFROST FAN</b>	
Option: B2160-08-000	
End Date: 9/5/02	

**AIR CONDITION  
SECTION**

1	12 GA.	YELLOW
2	12 GA.	ORANGE
3	16 GA.	BLUE

## A/C POWER HARNESS, MINOTOUR DRW, ER, SRW



- 10) APPLY BLACK CONVOLUTE TUBING OF MINIMUM SIZE, USE SLIT POLYAMIDE OR NYLON HEAT RESISTANT (MIN. 120 DEGREES C) SECURELY TAPE CONDUIT TO HARNESS ON ENDS.
- 9) (XX) MAY USE TERMINALS EQUIVALENT OR EXCEEDING VENDOR SPEC.
- 8) STRIP INSULATION BACK .375 INCHES ON UNTERMINATED LEADS.
- 7) (X) USE TERMINALS APPROPRIATE TO WIRE SIZE BASED ON CONNECTOR MFR. SPECIFICATIONS.
- 4) ALL DIMENSIONS ARE IN INCHES.
- 3) TAG HARNESS FOR IDENTIFICATION.
- 1) REFER TO DWG #52001136 FOR HARNESS SPECIFICATIONS.

NOTES:  
 1) MATERIAL N/A  
 2) BLANK N/A  
 3) CALCULATED WEIGHT N/A  
 4) BURRS N/A  
 5) FINISH N/A  
 6) COLOR N/A  
 7) BENDS N/A  
 8) WELDS N/A  
 9) REFERENCE N/A

B	XX	XX	BUTT SPLICE, 14-16 GA
A	XX	XX	BUTT SPLICE 12-14 GA

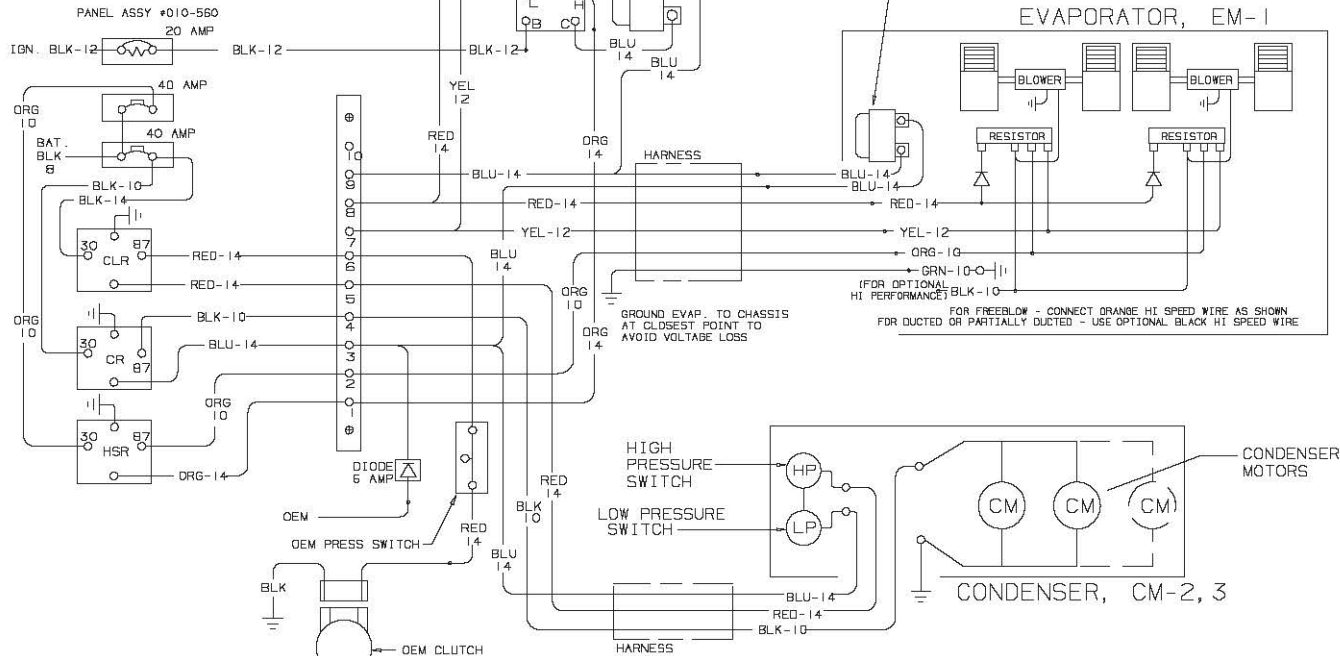
<b>Thomas</b> CABLES & WIRING	52005136 A
HARNESS, REAR A/C POWER	
Effective Date: 9/10/01	

VENDOR: A/C INDUSTRIES  
VENDOR DRAWING NO: 081-654

# CIRCUIT BREAKER IDENTIFICATION

- TYPE III MANUAL RESET-RESETS WHEN EXTERNAL BUTTON IS PUSHED.
- TYPE II- RESETS WHEN OVERCURRENT IS CORRECTED OR REMOVED.

CIRCUIT BREAKER COLOR CODE  
20 AMP-YELLOW DOT  
30 AMP-GREEN DOT  
40 AMP-RED DOT




NOTE:  
TO PREVENT THE POSSIBILITY OF ELECTRICAL SHORT,  
THE UNUSED HIGH SPEED WIRE, IN THE EVAPORATOR HARNESS,  
I.E. HIGH PERFORMANCE (BLACK) OR HIGH  
STANDARD (ORANGE), MUST BE CAPPED  
OR TAPED AT ITS TERMINATION.

## CAUTION

DO NOT USE CONDENSER WINTERGUARD KIT WHEN COMPRESSOR  
IS TO BE ENGAGED DURING DEFROST MODE.  
IF OEM COMPRESSOR IS USED DURING DEFROST MODE-  
IT MUST BE LOCKED OUT BELOW 40° F AMBIENT TO  
PREVENT BEING DAMAGED BY LIQUID SLUGGING.  
INLINE DIODES SHOULD BE RATED FOR AT  
LEAST 6 AMP 200 VOLT.

## CAUTION:

DO NOT INSTALL A/C ELECTRICAL PANEL IN AN AREA  
THAT IS NOT VENTILATED OR CAN EXCEED 150° F. OR 66° C.

	65008283 A
<p>DIAGRAM, 12K EMI EVAPORATOR, CM2 &amp; CM3 CONDENSER AIR CONDITIONING w/CHASSIS A/C</p>	

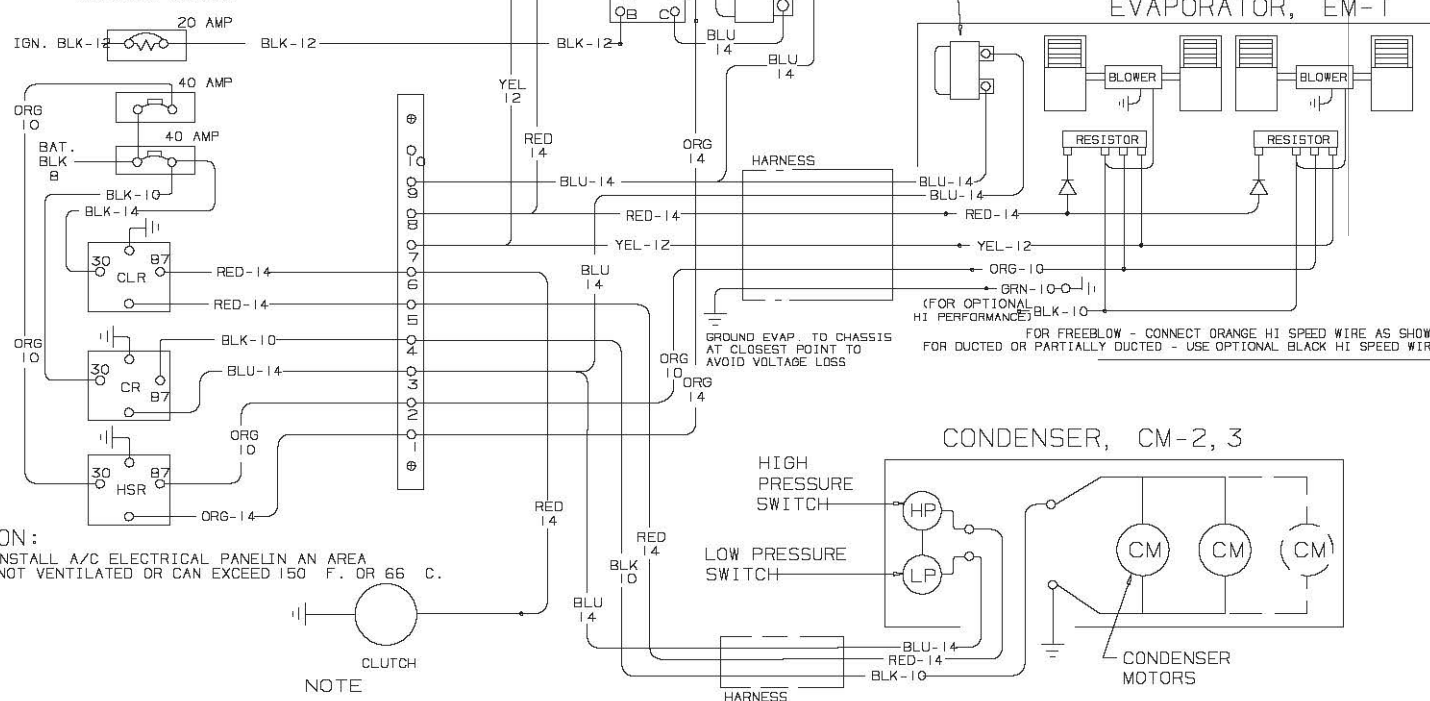


# CIRCUIT BREAKER IDENTIFICATION

- TYPE III MANUAL RESET-RESETS WHEN EXTERNAL BUTTON IS PUSHED.
- TYPE II- RESETS WHEN OVERCURRENT IS CORRECTED OR REMOVED.

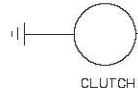
CIRCUIT BREAKER COLOR CODE  
20 AMP-YELLOW DOT  
30 AMP-GREEN DOT  
40 AMP-RED DOT

PANEL ASSY #010-560



## CAUTION:

DO NOT INSTALL A/C ELECTRICAL PANEL IN AN AREA THAT IS NOT VENTILATED OR CAN EXCEED 150 F. OR 66 C.




## NOTE

DISCONNECT DEM DASH AIR CLUTCH WIRE WHEN WIRING A/C SYSTEM (UNLESS WIRING MAX SYSTEM)

## NOTE:

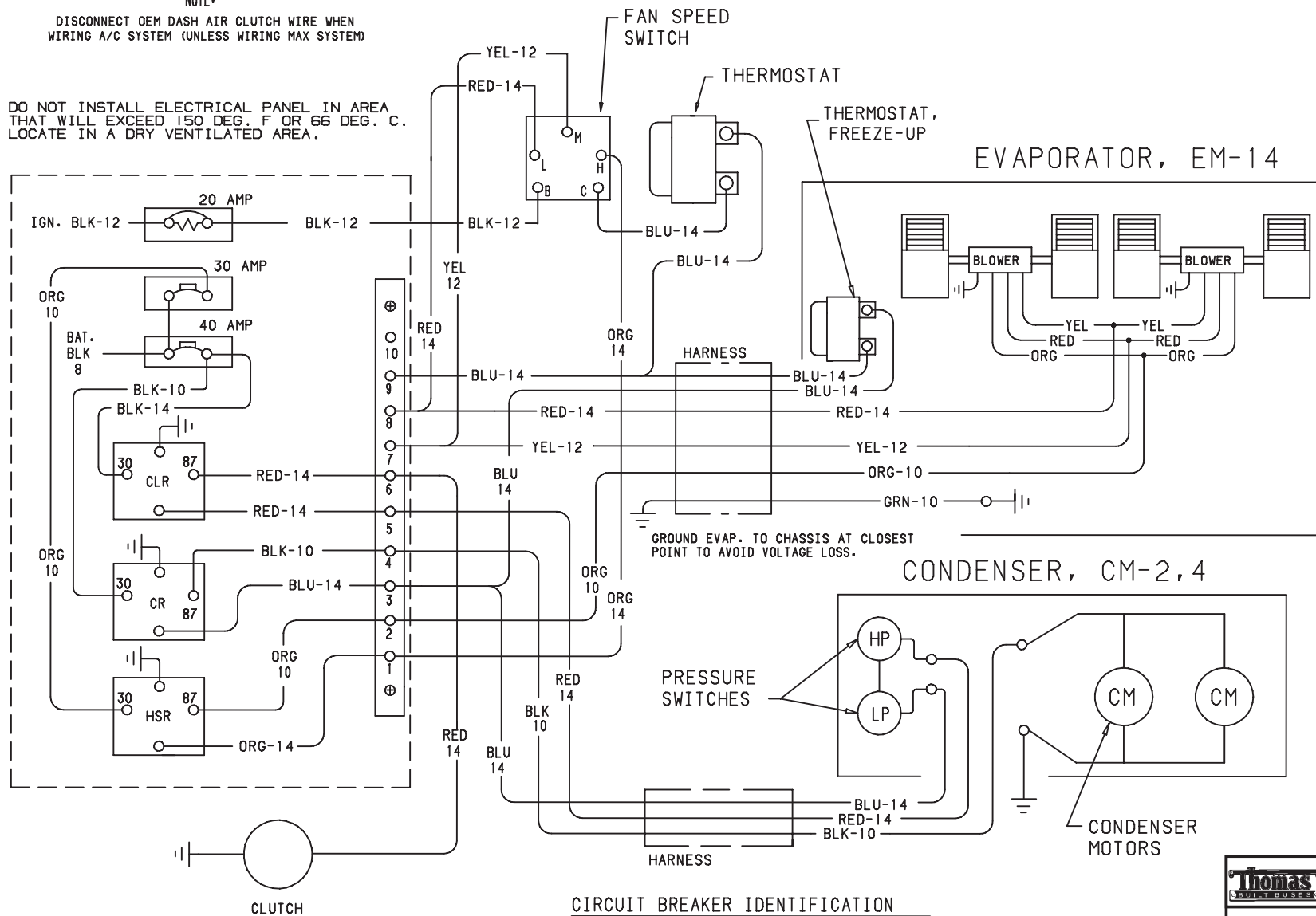
TO PREVENT THE POSSIBILITY OF ELECTRICAL SHORT, THE UNUSED HIGH SPEED WIRE, IN THE EVAPORATOR HARNESS, I.E. HIGH PERFORMANCE (BLACK) OR HIGH STANDARD (ORANGE), MUST BE CAPPED OR TAPED AT ITS TERMINATION.

VENDOR: A/C INDUSTRIES  
VENDOR DRAWING NO: 081-652

	65008281 A
<p>DIAGRAM 12K EMI EVAPORATOR, CM-2,3 CONDENSER AIR CONDITIONING without CHASSIS A/C</p>	

NOTE:  
DISCONNECT OEM DASH AIR CLUTCH WIRE WHEN  
WIRING A/C SYSTEM (UNLESS WIRING MAX SYSTEM)

NOTE: DO NOT INSTALL ELECTRICAL PANEL IN AREA  
THAT WILL EXCEED 150 DEG. F OR 66 DEG. C.  
LOCATE IN A DRY VENTILATED AREA.

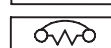


CIRCUIT BREAKER COLOR CODE  
20 AMP-YELLOW DOT  
30 AMP-GREEN DOT  
40 AMP-RED DOT

#### CIRCUIT BREAKER IDENTIFICATION



TYPE III MANUAL RESET-RESETS WHEN  
EXTERNAL BUTTON IS PUSHED.



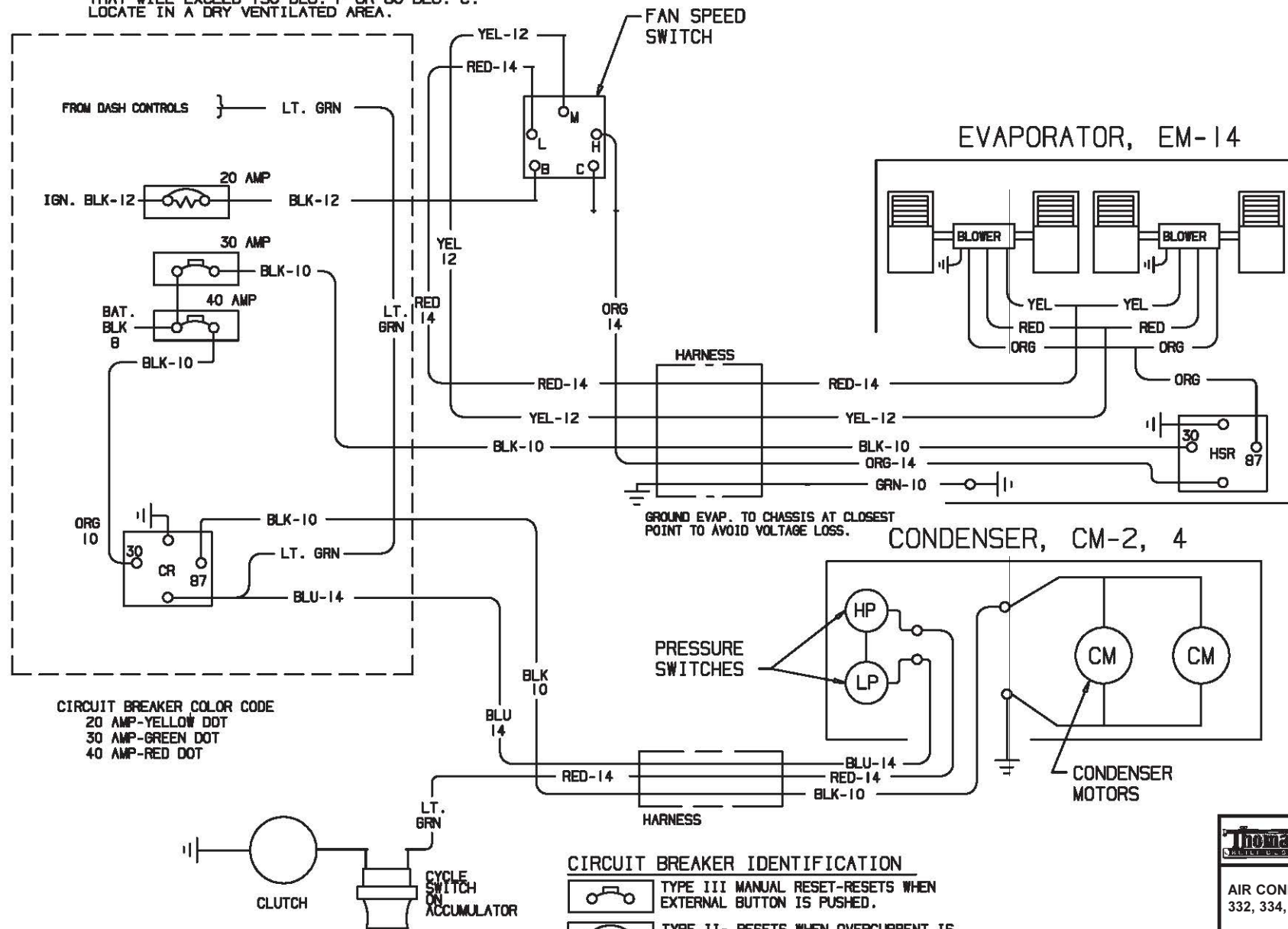
TYPE II- RESETS WHEN OVERCURRENT IS  
CORRECTED OR REMOVED.



66001193 B

AIR CONDITIONING AC  
332, 334

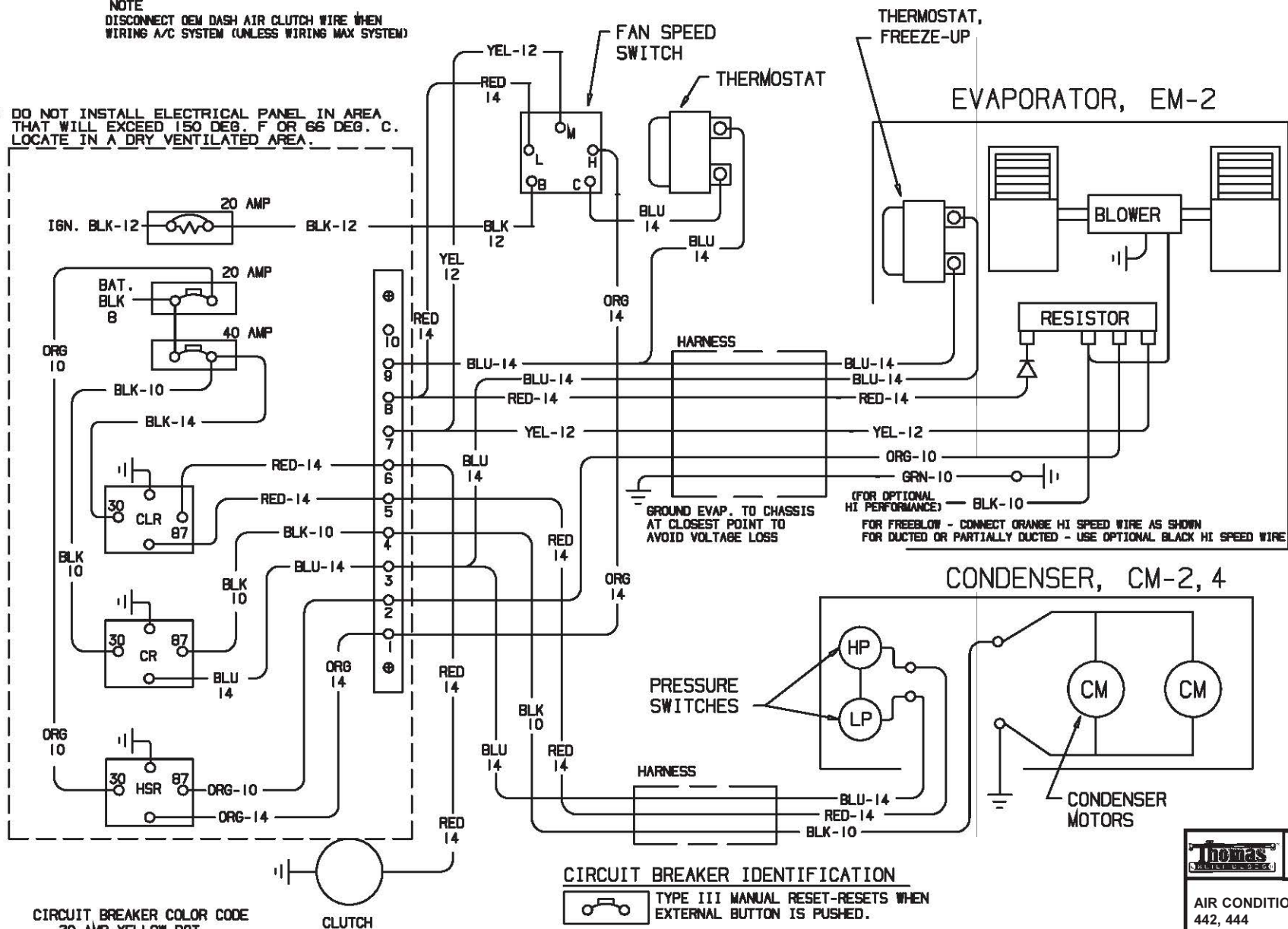
NOTE: DO NOT INSTALL ELECTRICAL PANEL IN AREA THAT WILL EXCEED 150 DEG. F OR 60 DEG. C. LOCATE IN A DRY VENTILATED AREA.



<b>Thomas</b> SOLUTIONS	66001198 B
AIR CONDITIONING AC 332, 334, GM TIE IN	

NOTE  
DISCONNECT OEM DASH AIR CLUTCH WIRE WHEN  
WIRING A/C SYSTEM (UNLESS WIRING MAX SYSTEM)

NOTE: DO NOT INSTALL ELECTRICAL PANEL IN AREA  
THAT WILL EXCEED 150 DEG. F OR 65 DEG. C.  
LOCATE IN A DRY VENTILATED AREA.



CIRCUIT BREAKER COLOR CODE  
20 AMP-YELLOW DOT  
30 AMP-GREEN DOT  
40 AMP-RED DOT

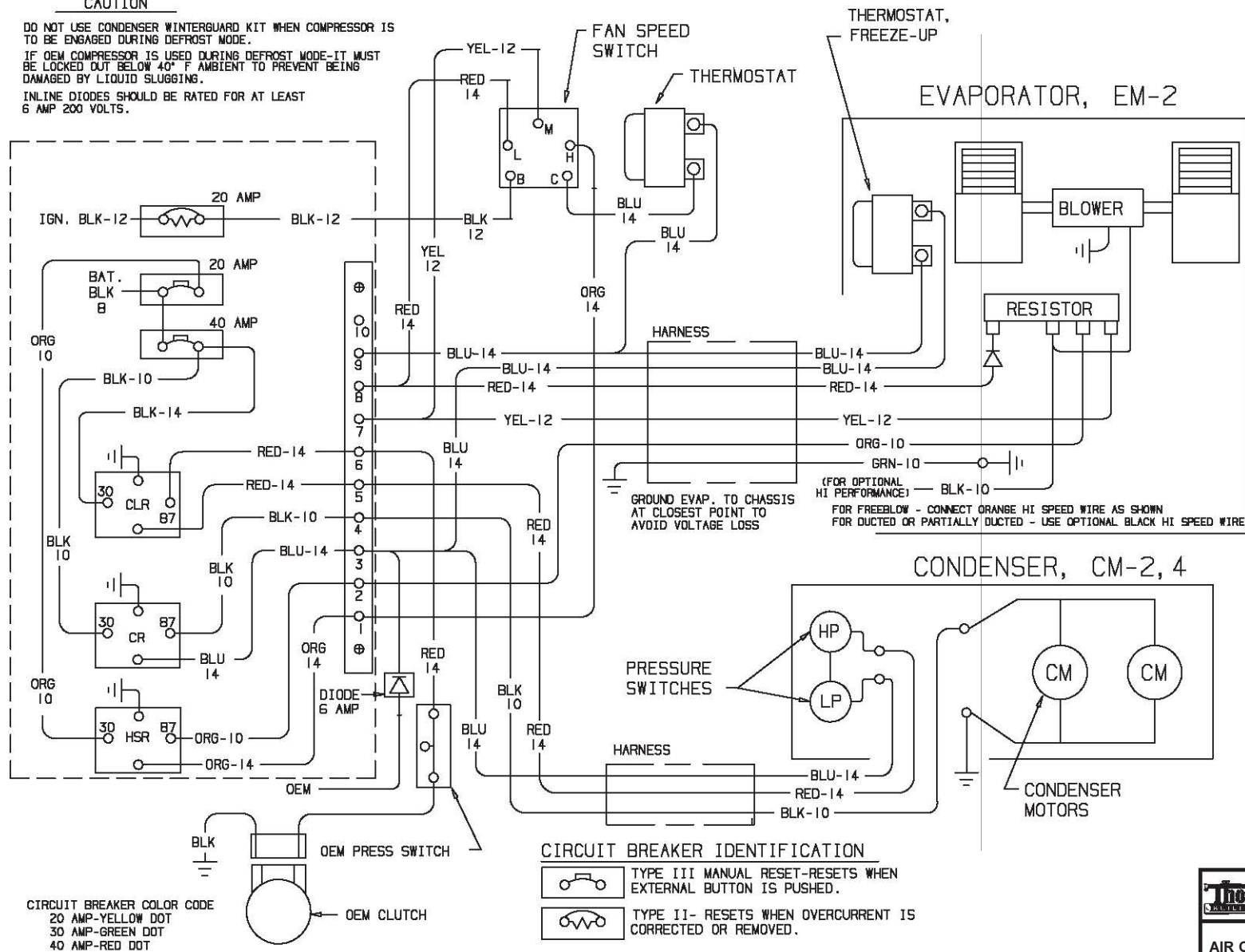
	66001192 B
AIR CONDITIONING AC 442, 444	

# CAUTION

DO NOT USE CONDENSER WINTERGUARD KIT WHEN COMPRESSOR IS TO BE ENGAGED DURING DEFROST MODE.

IF OEM COMPRESSOR IS USED DURING DEFROST MODE-IT MUST BE LOCKED OUT BELOW 40° F AMBIENT TO PREVENT BEING DAMAGED BY LIQUID SLUGGING.

INLINE DIODES MUST BE RATED FOR AT LEAST 6 AMP 200 VOLTS.



**Thomas**  
 66001197 B

AIR CONDITIONING AC-442, 443 TIE IN



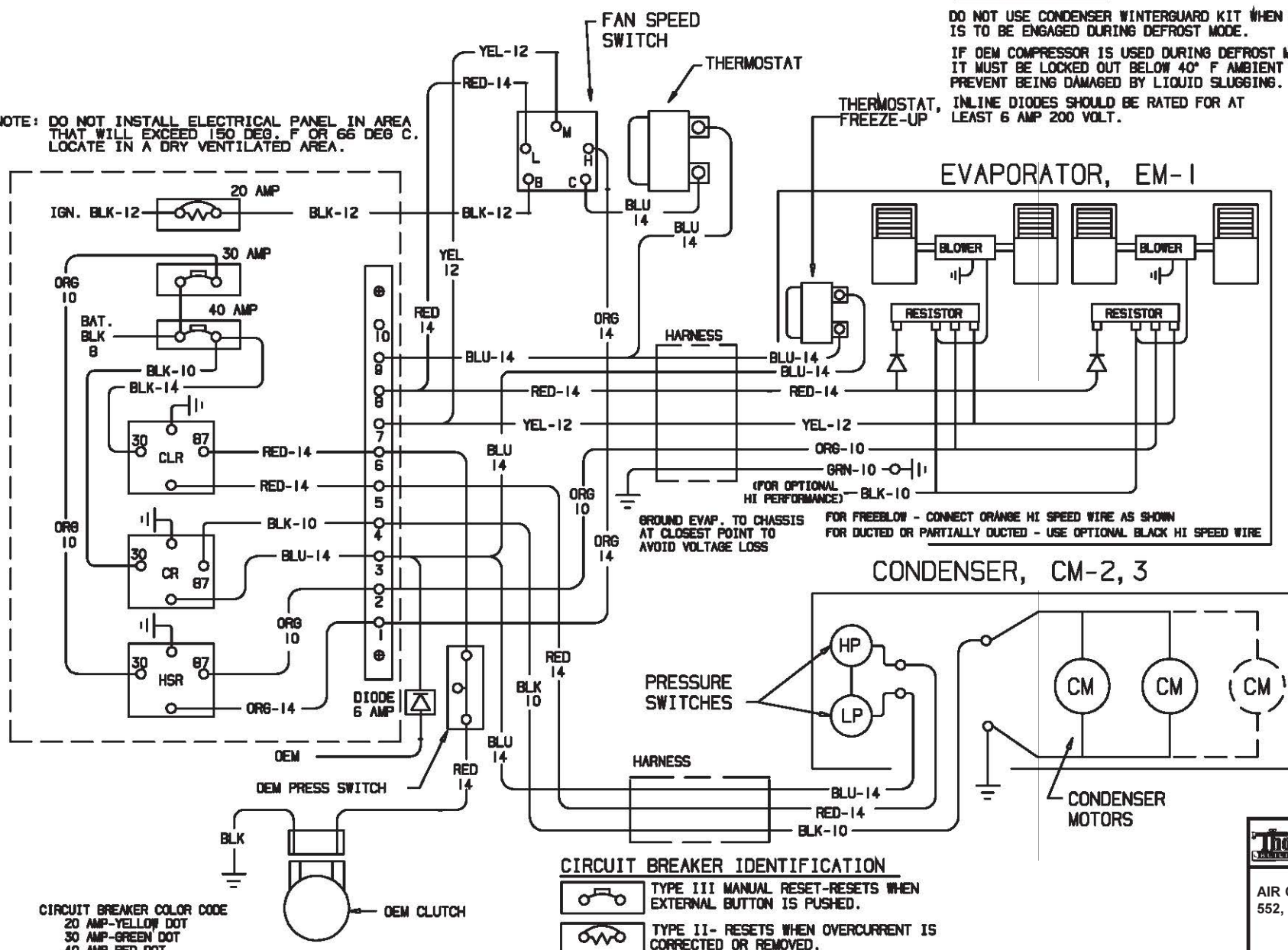
NOTE: DO NOT INSTALL ELECTRICAL PANEL IN AREA THAT WILL EXCEED 150 DEG. F OR 66 DEG C. LOCATE IN A DRY VENTILATED AREA.

# CAUTION

DO NOT USE CONDENSER WINTERGUARD KIT WHEN COMPRESSOR IS TO BE ENGAGED DURING DEFROST MODE.

IF OEM COMPRESSOR IS USED DURING DEFROST MODE- IT MUST BE LOCKED OUT BELOW 40° F AMBIENT TO PREVENT BEING DAMAGED BY LIQUID SLUGGING.

INLINE DIODES SHOULD BE RATED FOR AT LEAST 6 AMP 200 VOLT.

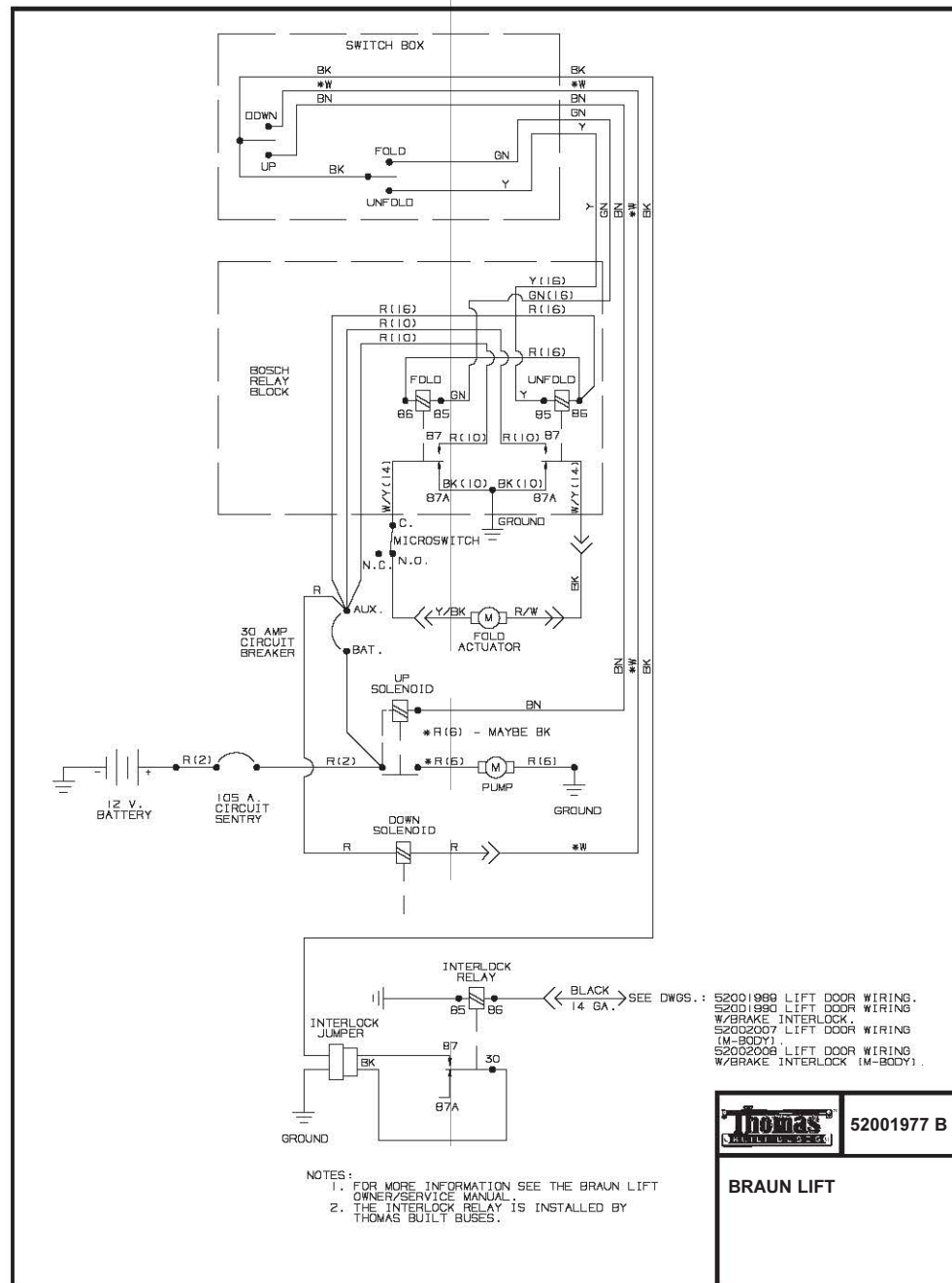
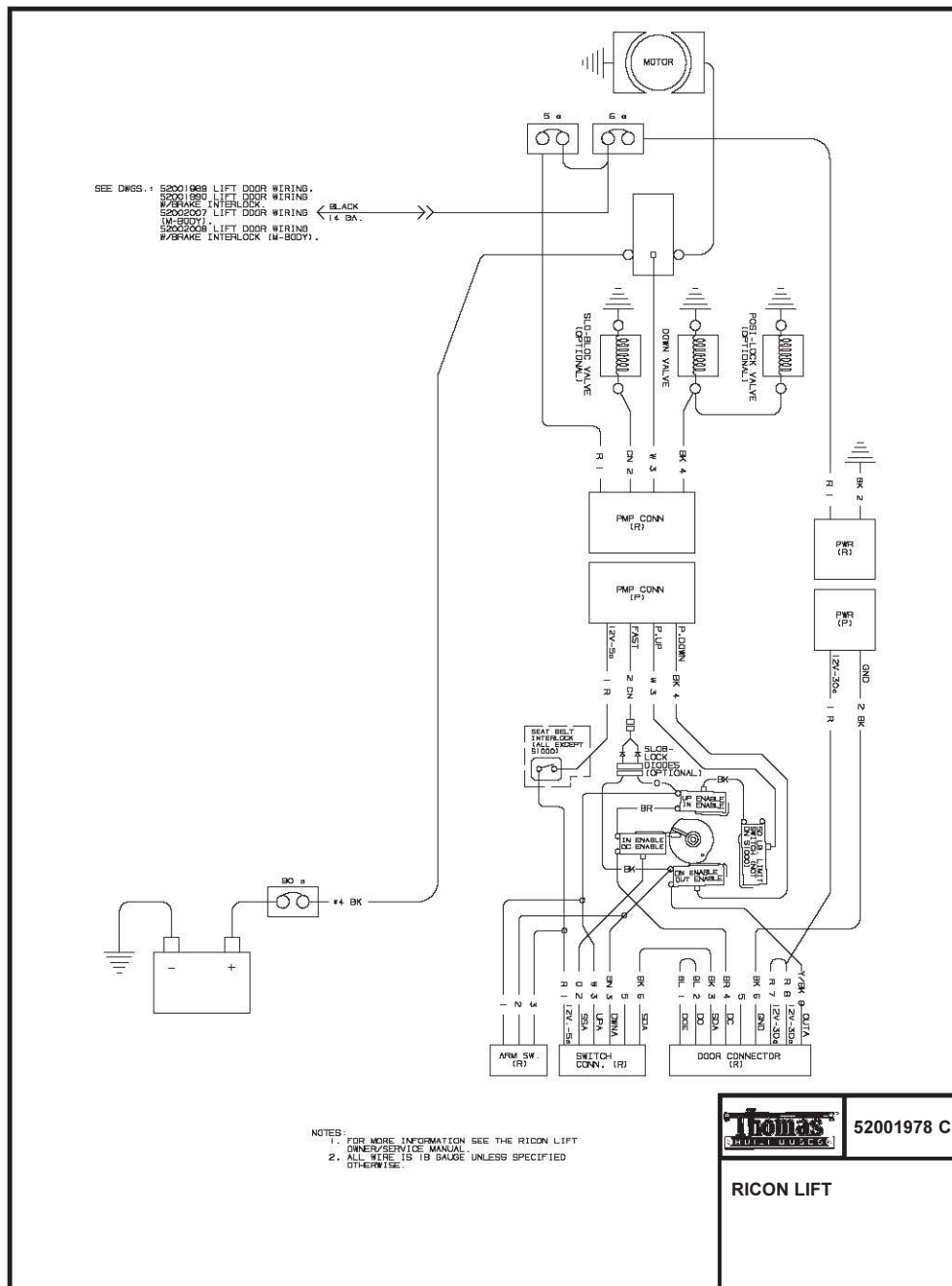


<b>Thomas</b> SOLUTIONS	66001194 B
AIR CONDITIONING AC-552, 553 TIE IN	



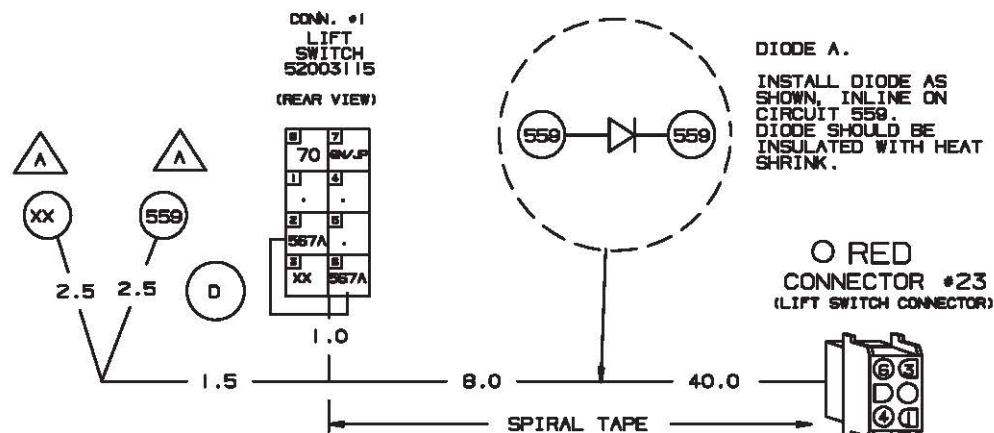
NOTES:

**LIFT  
SECTION**



CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLING	88816718001	SWITCH CONNECTOR	1
	PED	XX	18-20 GA TERMINAL	X
	PED	XX	14-16 GA TERMINAL	X
23	AMP	XX	14-20 GA. TERMINAL, PIN.	X
	AMP	XX	10-12 GA. TERMINAL, PIN.	X
	AMP	770027-1	6 POSITION CONNECTOR, CAP.	1
DIODE A	XX	XX	1 AMP, 400 VOLT.	1
	.	.	.	.
	.	.	.	.

LEAD #	AWG	COLOR	DESCRIPTION
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+).
559	16	WHITE	DOOR LATCH SWITCH TO LIFT RELAY K10, (-) SIGNAL.
567	18	BLACK	LIFT SWITCH TO REAR DOOR SWITCH, LIFT PWR. FEED.
567A	14	BLACK	LIFT RELAY KB TO LIFT SWITCH, LIFT POWER FEED.
GNV/JP	18	GREEN	SWITCH PANEL LIGHTS (-).
XX	14	RED	FROM FUSE PANEL TO LIFT RELAY



1	2	3
XX	567A	70
4	5	6
GNV/JP	559	.

6. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
5. WHERE "X" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEEDED FOR TERMINATION.
4. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
3. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
2. TAG HARNESS FOR IDENTIFICATION.
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.

NOTES:

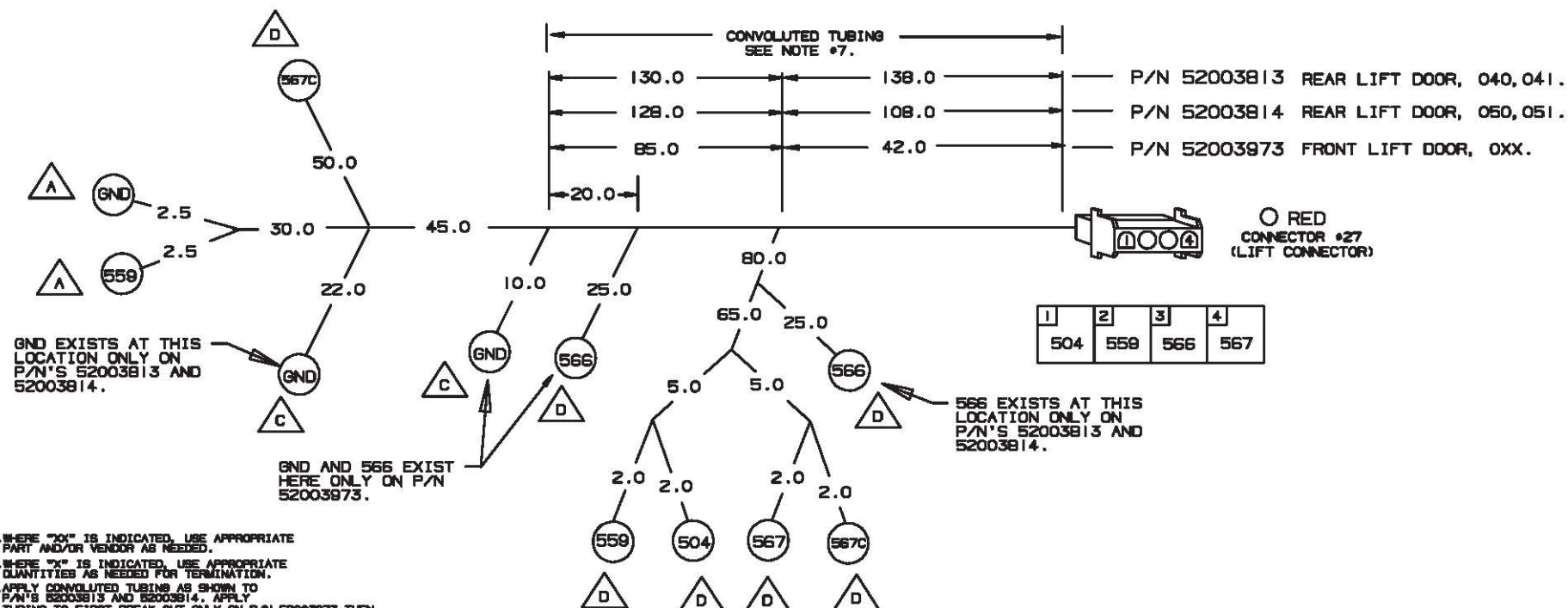
## LIFT SWITCH HARNESS

D	XX	XX	BUTT SPLICE, 14-16 GA BLUE.	X
C	XX	XX	RING TERMINAL, #10 STUD, 14-16 GA.	X
B	XX	XX	MALE RECEPT., 1/4", 14-16 GA.	X
A	XX	XX	FEMALE FAST-ON, 1/4", 14-16 GA.	X
	VENDOR	PART #	DESCRIPTION	QTY

<b>Thomas</b> CABLES & CONNECTORS	52003791 F
HARNESS, LIFT SWITCH	
End Date: 9/5/02	

CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLINS	88918718001	SWITCH CONNECTOR	.
	PED	XX	18-20 GA TERMINAL	X
	PED	XX	14-16 GA TERMINAL	X
27	AMP	XX	14-20 GA. TERMINAL, PIN.	X
	AMP	XX	10-12 GA. TERMINAL, PIN.	X
	AMP	770026-1	4 POSITION CONNECTOR, CAP.	1

LEAD #	AWG	COLOR	DESCRIPTION
504	16	BLACK	DOOR SWITCH TO BUZZER.
559	16	BLACK	DOOR LATCH SWITCH TO LIFT RELAY K10, (-) SIGNAL.
567	16	WHITE	LIFT SWITCH TO REAR DOOR SWITCH, LIFT PWR. FEED.
567C	16	WHITE	LIFT POWER CIRCUIT.
GND	16	WHITE	CHASSIS GROUND.
566	16	GREEN	LIFT DOOR LIGHT.



- WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
- WHERE "X" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEEDED FOR TERMINATION.
- APPLY CONVULUTED TUBING AS SHOWN TO P/N'S 52003813 AND 52003814. APPLY TUBING TO FIRST BREAK-OUT ONLY ON P/N 52003873, THEN FULLY TAPE FROM FIRST BREAKOUT TO END AS SHOWN.
- FULLY TAPE WHERE HEAVY LINES HAVE BEEN SHOWN.
- USE CONVULUTED TUBING OF MINIMUM SIZE WHERE SHOWN. TAPE CONDUIT TO HARNESS ON ENDS.
- STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
- REFER TO DWG. #82001138 FOR HARNESS SPECIFICATIONS.
- TAG HARNESS FOR IDENTIFICATION.
- CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.

#### NOTES:

D	XX	XX	BUTT SPLICE, 14-16 GA BLUE.	X
C	XX	XX	RING TERMINAL, 1/4" 14-16 AWG.	X
B	XX	XX	MALE RESEP., 1/4", 14-16 GA.	X
A	XX	XX	FEMALE FAST-ON, 1/4", 14-16 GA.	X
	VENDOR	PART #	DESCRIPTION	QTY

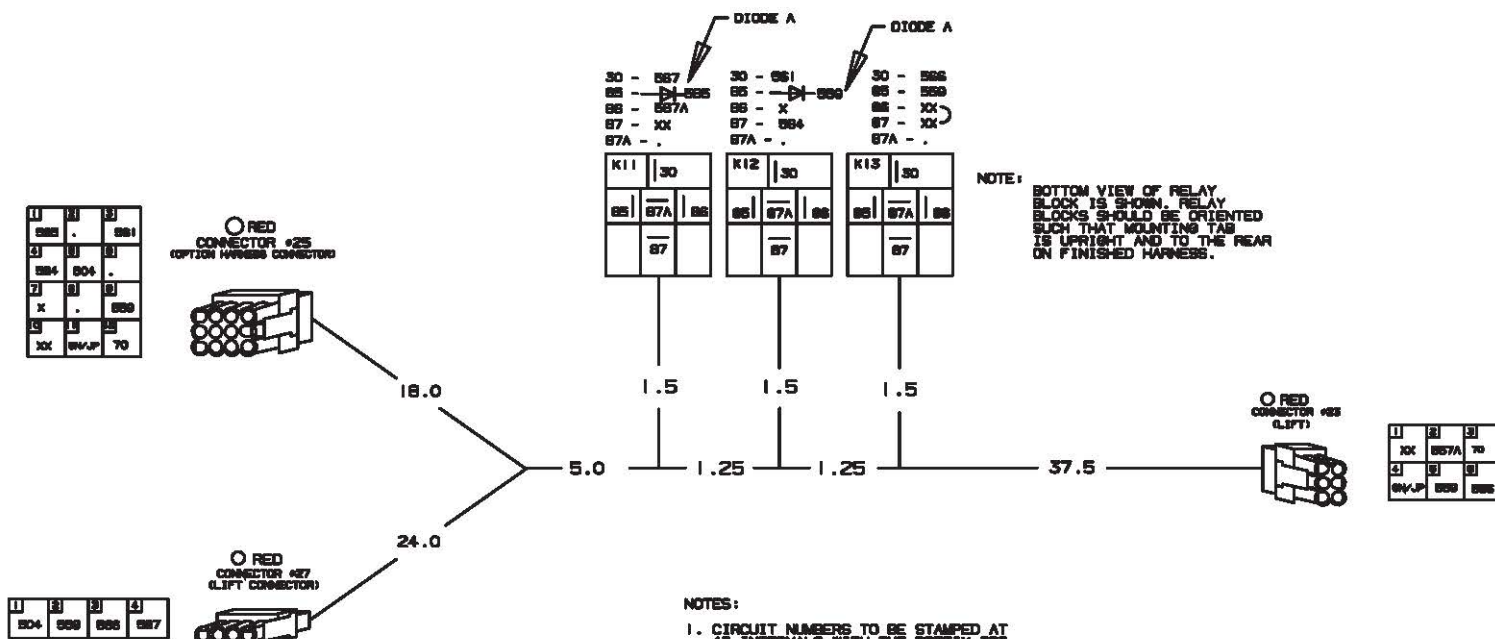
## LIFT HARNESS (BODY)

<b>Thomas</b> CABLES & WIRING	52003794 C
HARNESS CHART, LIFT POWER	

CONN	VENDOR	PART #	DESCRIPTION
25	AMP	770022-1	12 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA TERMINAL, SOCKET
	AMP	XX	10-12 TERMINAL, SOCKET
23	AMP	770020-1	6 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA TERMINAL, SOCKET
	AMP	XX	10-12 GA TERMINAL, SOCKET
27	AMP	770019-1	4 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA TERMINAL, SOCKET
	AMP	XX	10-12 GA TERMINAL, SOCKET
RELAY BLOCKS	HELLA	87122	HOUSING-RELAY, 8 POSITION.
	XX	XX	TERMINAL-FEMALE, 1/4", 14-16 GA.
	XX	XX	TERMINAL-FEMALE, 1/4", 10-12 GA.
DIODE A	XX	XX	1 AMP, 400 VOLT

CIR	GA	COLOR	DESCRIPTION
84/P	16	GREEN	SWITCH PANEL LIGHTS (-).
XX	16	RED	FROM FUSE PNL. (BAT) TO RELAYS.
X	16	RED	FROM FUSE PNL. (IGN) TO RELAYS.
70	16	WHITE/BLACK	SWITCH PANEL LIGHTS (+) FEED.
804	16	RED	DOOR SWITCH (LIFT) TO BUZZER. (-) SIGNAL.
859	16	WHITE	LIFT DOOR LATCH SWITCH (-) SIGNAL.
861	16	LIGHT GREEN	TRANSMISSION LOCK OUT CIRCUIT.
864	16	GREEN/WHITE	TRANSMISSION LOCK OUT CIRCUIT.
866	16	GREEN	LIFT DOOR LIGHT FEED, FROM RELAY K13.
867	16	BLACK	LIFT RELAY TO REAR DOOR, LIFT POWER FEED.
867A	16	BLACK	LIFT SWITCH POWER FEED, FROM RELAY K11.
868	16	YELLOW	PARK BRAKE SIGNAL FROM CHASSIS. (-).

USE HEAT SHRINK TO FULLY INSULATE DIODE BODY AND LEADS.



#### NOTES:

1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.
2. TAG HARNESS FOR IDENTIFICATION.
3. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
5. FULLY TAPE HARNESS WHERE HEAVY LINES HAVE BEEN SHOWN. IN TAPED AREAS, THE HARNESS MUST BE SMOOTH AND NON-TWISTED.
6. USE WIRE TIES TO HOLD HARNESS WHERE NEEDED, MINIMUM AMOUNT AND SIZE.
7. CONNECTORS AND BREAK-OUTS MUST FACE AS INDICATED ON THE DRAWINGS.
8. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
9. CONNECTOR #23 SHOULD BE TAGGED "LIFT". TAG SHOULD BE PLACED 1 INCH BEFORE CONN. BODY.

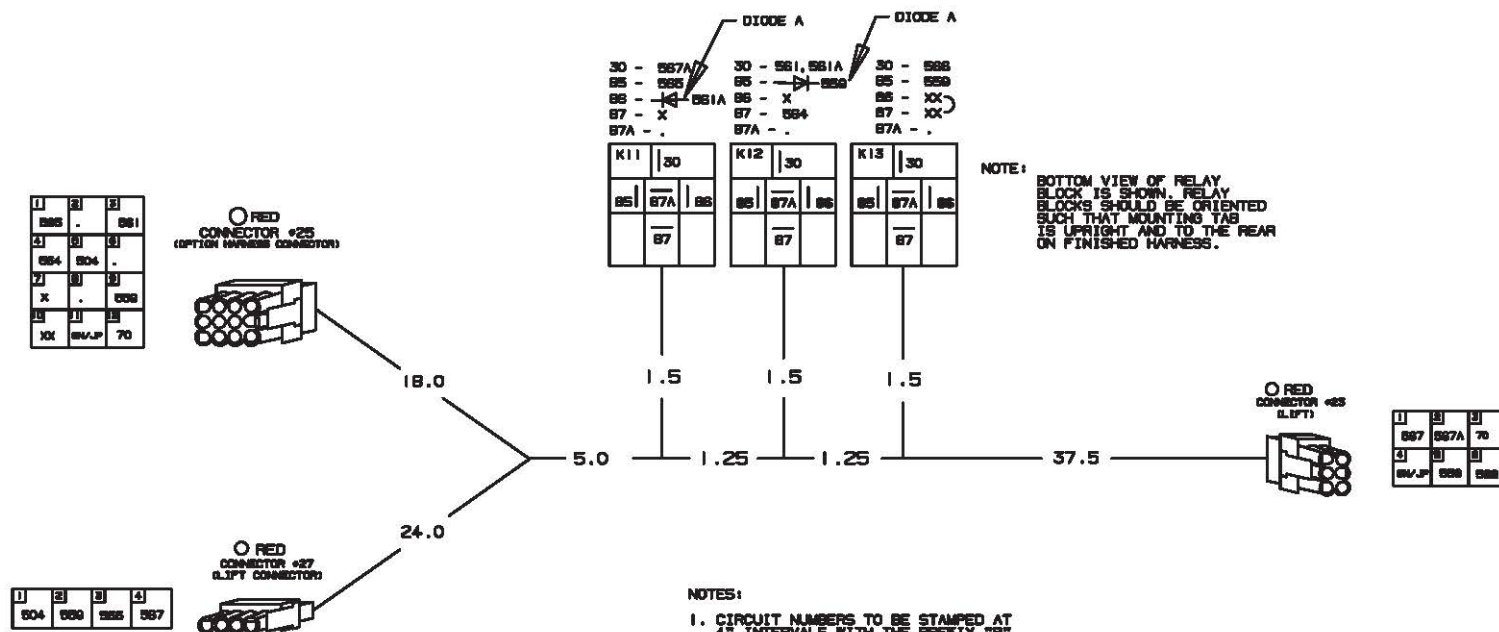
<b>Thomas</b> SOLUTIONS	52004924 D
HARNESS, LIFT OPTION INTERFACE,GM	



CONN	VENDOR	PART #	DESCRIPTION
25	AMP	770022-1	12 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA TERMINAL, SOCKET
	AMP	XX	10-12 TERMINAL, SOCKET
23	AMP	770020-1	6 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA TERMINAL, SOCKET
	AMP	XX	10-12 GA TERMINAL, SOCKET
27	AMP	770019-1	4 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA TERMINAL, SOCKET
	AMP	XX	10-12 GA TERMINAL, SOCKET
RELAY BLOCKS	HELLA	87122	HOUSING-RELAY, 6 POSITION.
	XX	XX	TERMINAL-FEMALE, 1/4", 14-16 GA.
	XX	XX	TERMINAL-FEMALE, 1/4", 10-12 GA.
DIODE A	XX	XX	1 AMP, 400 VOLT

CIR	GA	COLOR	DESCRIPTION
8W/P	16	GREEN	SWITCH PANEL LIGHTS (-).
XX	16	RED	FROM FUSE PNL. (BAT) TO RELAYS.
X	16	RED	FROM FUSE PNL. (IGN) TO RELAYS.
70	16	WHITE/BLACK	SWITCH PANEL LIGHTS (+) FEED.
804	16	RED	DOOR SWITCH (LIFT) TO BUZZER. (-) SIGNAL.
869	16	WHITE	LIFT DOOR LATCH SWITCH (-) SIGNAL.
861	16	LIGHT GREEN	TRANSMISSION LOCK OUT CIRCUIT.
861A	16	LIGHT GREEN	RELAY JUMPER, TRANSMISSION LOCK-OUT.
864	16	GREEN/WHITE	TRANSMISSION LOCK OUT CIRCUIT.
866	16	GREEN	LIFT DOOR LIGHT FEED, FROM RELAY K13.
867	16	BLACK	LIFT SWITCH TO REAR DOOR, LIFT POWER FEED.
867A	16	BLACK	LIFT SWITCH POWER FEED, FROM RELAY K11.
868	16	YELLOW	PARK BRAKE SIGNAL FROM CHASSIS, (-).

USE HEAT SHRINK TO FULLY INSULATE DIODE BODY AND LEADS.



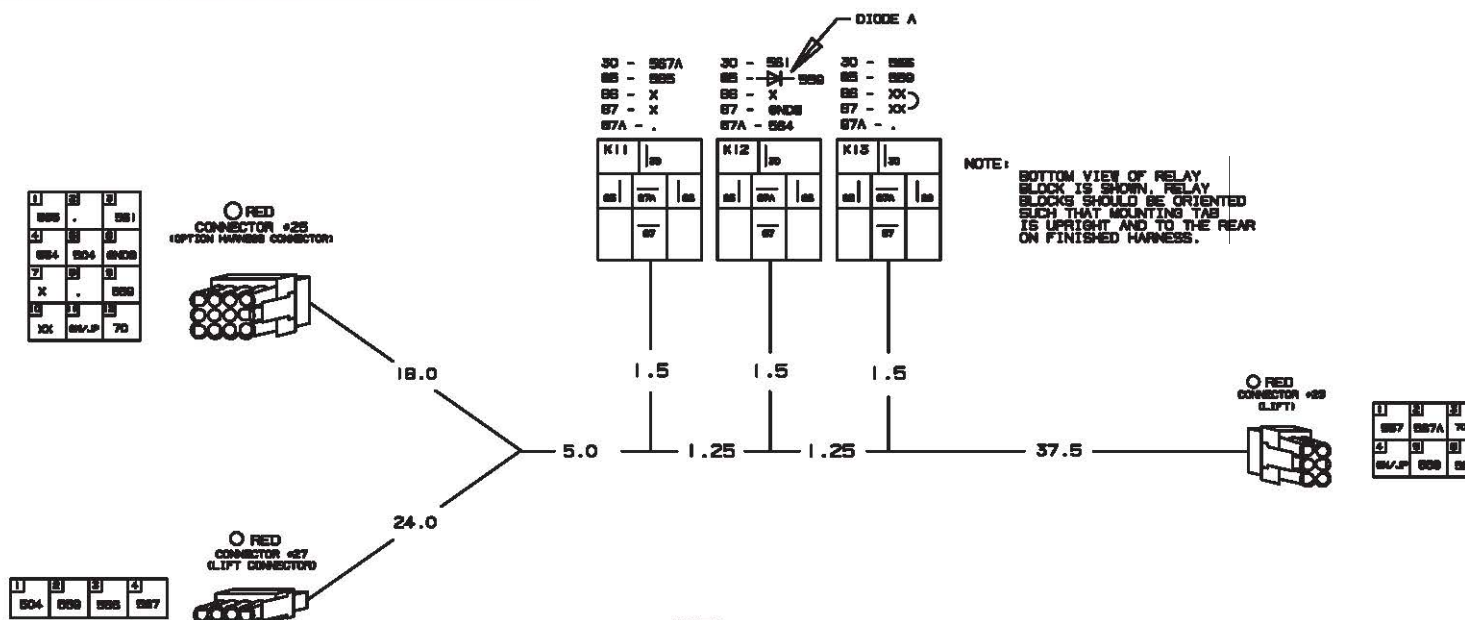
#### NOTES:

1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.
2. TAG HARNESS FOR IDENTIFICATION.
3. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
4. REFER TO DWS. #52001136 FOR HARNESS SPECIFICATIONS.
5. FULLY TAPE HARNESS WHERE HEAVY LINES HAVE BEEN SHOWN. IN TAPED AREAS, THE HARNESS MUST BE SMOOTH AND NON-TWISTED.
6. USE WIRE TIES TO HOLD HARNESS WHERE NEEDED, MINIMUM AMOUNT AND SIZE.
7. CONNECTORS AND BREAK-OUTS MUST FACE AS INDICATED ON THE DRAWING.
8. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
9. CONNECTOR #23 SHOULD BE TAGGED "LIFT". TAB SHOULD BE PLACED 1 INCH BEFORE CONN. BODY.

<b>Thomas</b> CABLE MANAGEMENT	52004117 D
HARNESS, LIFT OPTION INTERFACE, GM	
End Date: 9/5/02	

CONN	VENDOR	PART #	DESCRIPTION
25	AMP	770022-1	12 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA TERMINAL, SOCKET
	AMP	XX	10-12 TERMINAL, SOCKET
23	AMP	770020-1	6 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA TERMINAL, SOCKET
	AMP	XX	10-12 GA TERMINAL, SOCKET
27	AMP	770019-1	4 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA TERMINAL, SOCKET
	AMP	XX	10-12 GA TERMINAL, SOCKET
RELAY BLOCKS	HELLA	87122	HOUSING-RELAY, 6 POSITION.
	X	XX	TERMINAL-FEMALE, 1/4", 14-16 GA.
	X	XX	TERMINAL-FEMALE, 1/4", 10-12 GA.
DIODE A	X	XX	1 AMP, 400 VOLT

CIR	GA	COLOR	DESCRIPTION
SW/P	16	GREEN	SWITCH PANEL LIGHTS (-).
GNDB	16	WHITE	RELAY GROUND (OPTION HARNESS).
XX	16	RED	FROM FUSE PNL. (BAT) TO RELAYS.
X	16	RED	FROM FUSE PNL. (IGN) TO RELAYS.
70	16	WHITE/BLACK	SWITCH PANEL LIGHTS (+) FEED.
504	16	RED	DOOR SWITCH (LIFT) TO BUZZER. (-) SIGNAL.
559	16	WHITE	LIFT DOOR LATCH SWITCH (-) SIGNAL.
561	16	LIGHT GREEN	TRANSMISSION LOCK OUT CIRCUIT.
564	16	GREEN/WHITE	TRANSMISSION LOCK OUT CIRCUIT.
566	16	GREEN	LIFT DOOR LIGHT FEED, FROM RELAY K13.
567	16	BLACK	LIFT SWITCH TO REAR DOOR, LIFT POWER FEED.
567A	16	BLACK	LIFT SWITCH POWER FEED FROM RELAY K11.
568	16	YELLOW	PARK BRAKE SIGNAL, (-).



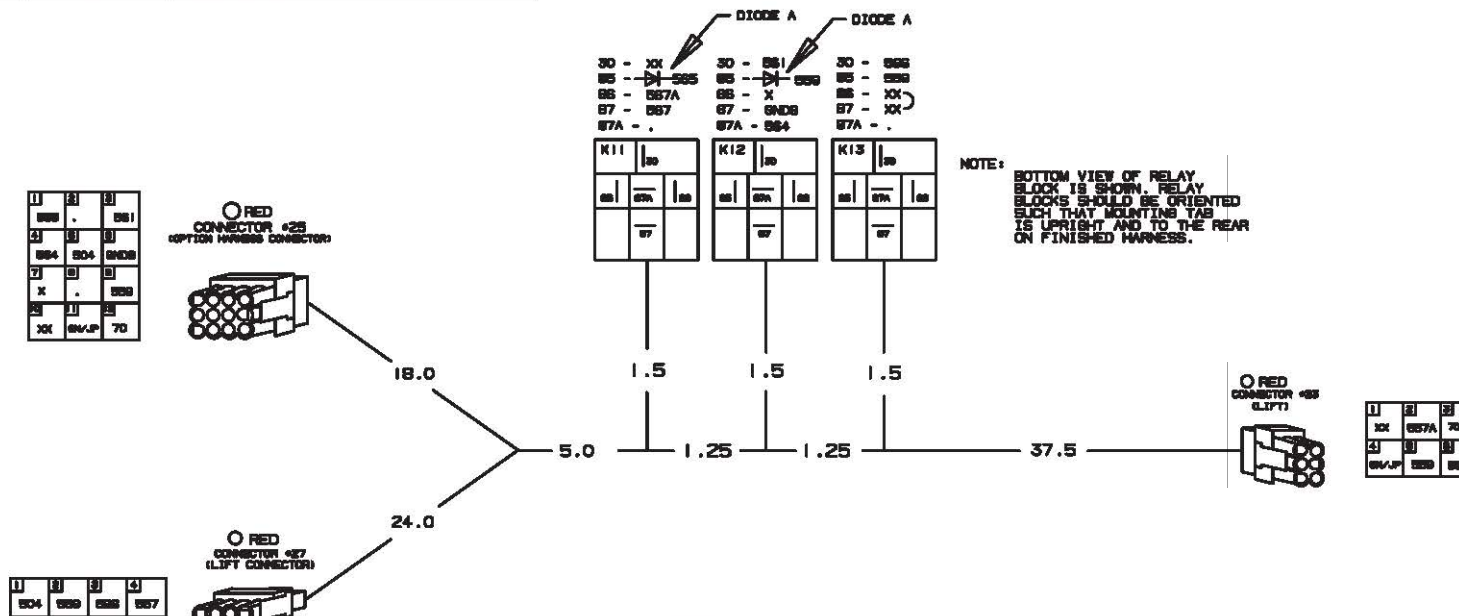
#### NOTES:

1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.
2. TAG HARNESS FOR IDENTIFICATION.
3. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
5. FULLY TAPE HARNESS WHERE HEAVY LINES HAVE BEEN SHOWN. IN TAPED AREAS, THE HARNESS MUST BE SMOOTH AND NON-TWISTED.
6. USE WIRE TIES TO HOLD HARNESS WHERE NEEDED, MINIMUM AMOUNT AND SIZE.
7. CONNECTORS AND BREAK-OUTS MUST FACE AS INDICATED ON THE DRAWING.
8. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
9. CONNECTOR #23 SHOULD BE TAGGED "LIFT". TAG SHOULD BE PLACED 1 INCH BEFORE CONN. BODY.

<b>Thomas</b> CABLES • WIRING • HARNESS	52004122 B
HARNESS, LIFT OPTION INTERFACE, FORD	
Effective Date: 1/25/01	

CONN	VENDOR	PART #	DESCRIPTION
25	AMP	770022-1	12 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA TERMINAL, SOCKET
	AMP	XX	10-12 TERMINAL, SOCKET
23	AMP	770020-1	8 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA TERMINAL, SOCKET
	AMP	XX	10-12 GA TERMINAL, SOCKET
27	AMP	770018-1	4 POSITION CONNECTOR, PLUG
	AMP	XX	14-16 GA TERMINAL, SOCKET
	AMP	XX	10-12 GA TERMINAL, SOCKET
RELAY BLOCKS	HELLA	87122	HOUSING-RELAY, 5 POSITION.
	X	XX	TERMINAL-FEMALE, 1/4", 14-16 GA.
	X	XX	TERMINAL-FEMALE, 1/4", 10-12 GA.
DIODE A	X	XX	1 AMP, 400 VOLT

CIR	GA	COLOR	DESCRIPTION
SW/P	16	GREEN	SWITCH PANEL LIGHTS (-).
GNDB	16	WHITE	RELAY GROUND (OPTION HARNESS).
XX	16	RED	FROM FUSE PNL. (BAT) TO RELAYS.
X	16	RED	FROM FUSE PNL. (IGN) TO RELAYS.
70	16	WHITE/BLACK	SWITCH PANEL LIGHTS (+) FEED.
504	16	RED	DOOR SWITCH (LIFT) TO BUZZER. (-) SIGNAL.
555	16	WHITE	LIFT DOOR LATCH SWITCH (-) SIGNAL.
551	16	LIGHT GREEN	TRANSMISSION LOCK OUT CIRCUIT.
554	16	GREEN/WHITE	TRANSMISSION LOCK OUT CIRCUIT.
555	16	GREEN	LIFT DOOR LIGHT FEED, FROM RELAY K13.
557	16	BLACK	LIFT RELAY TO REAR DOOR, LIFT POWER FEED.
557A	16	BLACK	LIFT SWITCH POWER FEED FROM RELAY K11.
555	16	YELLOW	PARK BRAKE SIGNAL, (-).



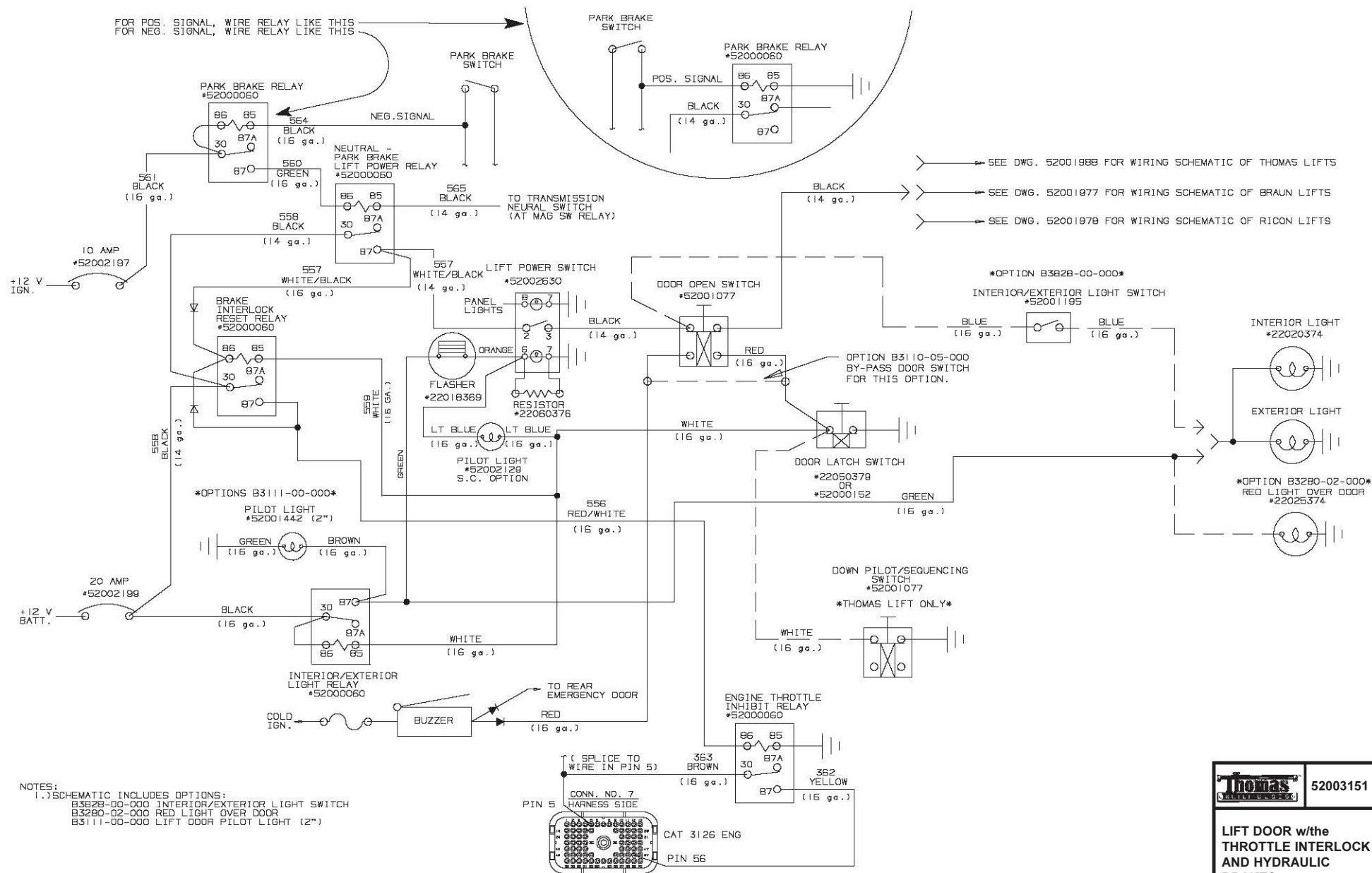
#### NOTES:

1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "S" ON ALL LEADS.
2. TAG HARNESS FOR IDENTIFICATION.
3. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
4. REFER TO DWS. #52001136 FOR HARNESS SPECIFICATIONS.
5. FULLY TAPE HARNESS WHERE HEAVY LINES HAVE BEEN SHOWN. IN TAPED AREAS, THE HARNESS MUST BE SMOOTH AND NON-TWISTED.
6. USE WIRE TIES TO HOLD HARNESS WHERE NEEDED, MINIMUM AMOUNT AND SIZE.
7. CONNECTORS AND BREAK-OUTS MUST FACE AS INDICATED ON THE DRAWING.
8. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
9. CONNECTOR #23 SHOULD BE TAGGED "LIFT". TAG SHOULD BE PLACED 1 INCH BEFORE CONN. BODY.

<b>Thomas</b> Cable Management Systems	52004122 B
HARNESS, LIFT OPTION INTERFACE, FORD	
Effective Date: 1/25/01	

**DOOR  
SECTION**

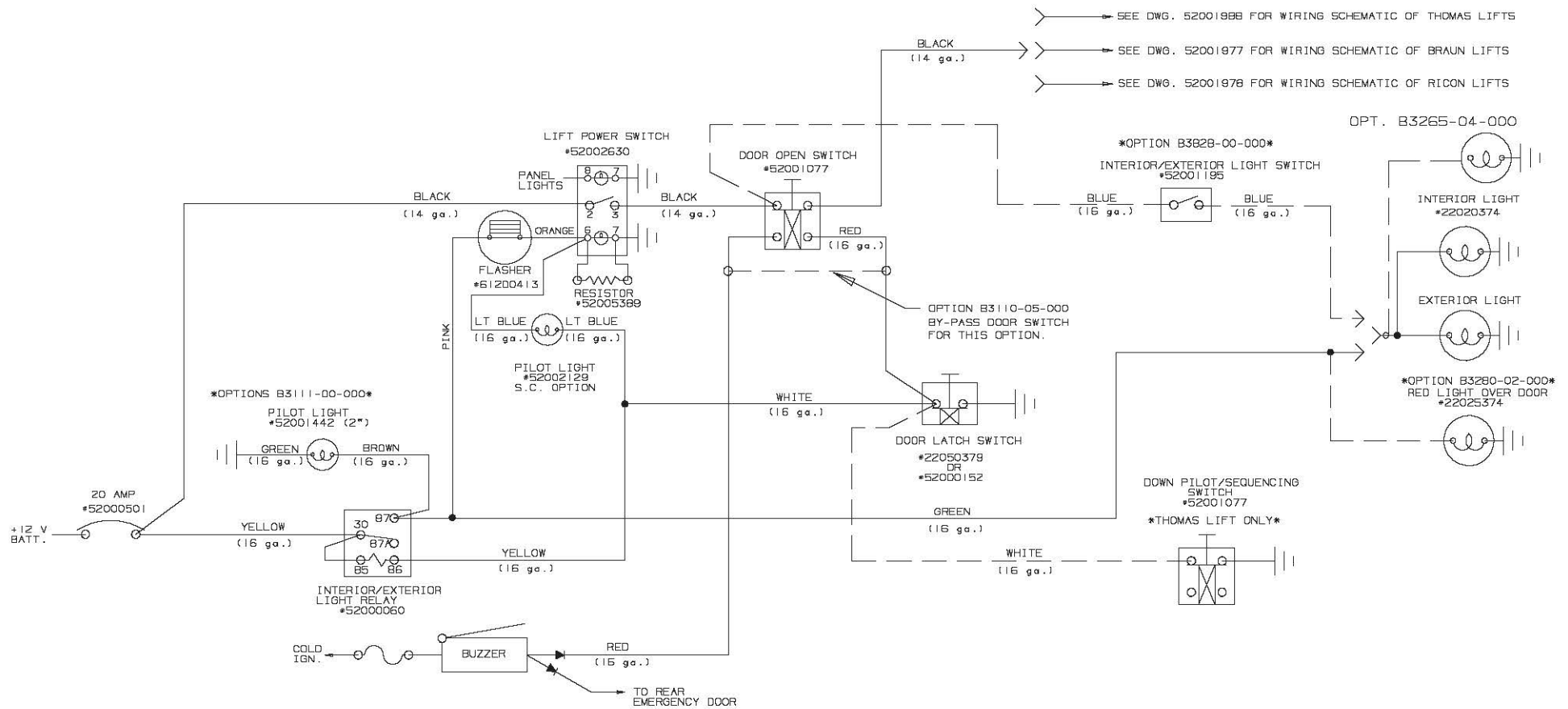
FOR POS. SIGNAL, WIRE RELAY LIKE THIS  
FOR NEG. SIGNAL, WIRE RELAY LIKE THIS




NOTES:  
1.) SCHEMATIC INCLUDES OPTIONS:  
B32B0-02-000 INTERIOR/EXTERIOR LIGHT SWITCH  
B32B0-02-000 RED LIGHT OVER DOOR  
B3111-00-000 LIFT DOOR PILOT LIGHT (2")

<b>Thomas</b> CRAFTSMAN	<b>52003151 B</b>
<b>LIFT DOOR w/the THROTTLE INTERLOCK AND HYDRAULIC BRAKES</b>	





NOTES:  
 1.) SCHEMATIC INCLUDES OPTIONS:  
 B3928-00-000 INTERIOR/EXTERIOR LIGHT SWITCH  
 B3280-02-000 RED LIGHT OVER DOOR  
 B3111-00-000 LIFT DOOR PILOT LIGHT (2")  
 B3285-04-000 LIFT DOOR LANDING LIGHT, HOODED

	52001989 H
LIFT DOOR	

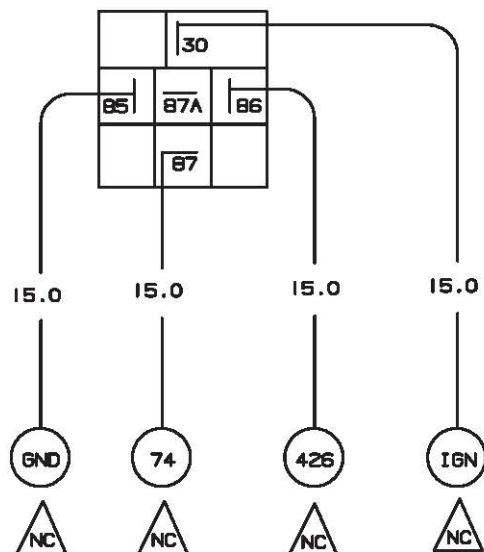


CONN	VENDOR	PART #	DESCRIPTION	QTY
RELAY BLOCK	HELLA	87122	HOUSING-RELAY, 5 POSITION	1
	.	.	.	.
	INTERLOCK	JBC-1230-1	TERMINAL-FEMALE, 1/4", 14-16 GA.	4

DOME OPT.  
 B3255-04-000

30 - IGN  
 85 - GND  
 86 - 426  
 87 - 74  
 87A - .

LEAD #	AWG	COLOR	DESCRIPTION
IGN	16	RED	FEED FROM FUSE PANEL.
GND	16	WHITE	BODY GROUND.
426	16	GREEN	AIR DOOR OPEN SIGNAL.
74	16	BLACK	STEPLIGHTS FEED.
.	.	.	.



4. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.

3. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.

2. TAG HARNESS FOR IDENTIFICATION.

1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"

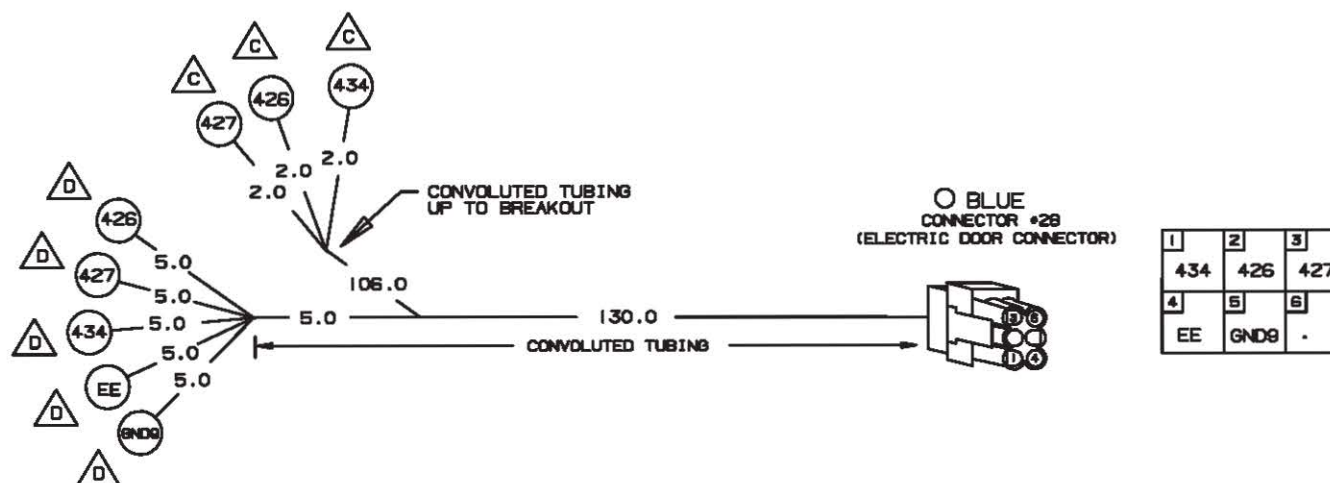
NOTES: ON ALL LEADS.

A	14-16 GA. BUTT-SPLICE	0
	DESCRIPTION	QTY

<b>Thomas</b> CABLES • WIRING • HARNESS	52003992 A
HARNESS, AIR DOORS	
Option: B3255-04-000	

CONN	VENDOR	PART #	DESCRIPTION	QTY
I	CARLING	99916716001	SWITCH CONNECTOR	.
	PED	12015669	18-20 GA TERMINAL	.
	PED	12015670	14-16 GA TERMINAL	.
29	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	5
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	.
	AMP	770020-1	6 POSITION CONNECTOR, PLUG.	1
RELAY KI	HELLA	87122	HOUSING-RELAY, 6 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

LEAD #	AWG	COLOR	DESCRIPTION
426	16	GREEN	TO ELECTRIC DOOR, OPEN.
427	16	YELLOW	TO ELECTRIC DOOR, CLOSE.
434	16	BLACK	TO ELECTRIC DOOR, COMMON MOTOR LEAD.
EE	14	RED	FUSE PANEL (BAT.) TO ELECTRIC DOOR MOTOR.
GND9	14	LIGHT BLUE	DOOR MOTOR GROUND.
.	.	.	.
.	.	.	.



6. USE CONVULATED TUBING OF MINIMUM SIZE UP TO BREAKOUTS.
  5. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
  4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
  3. FULLY TAPE BREAKOUTS FOR 3"-2" SPACING OTHERWISE.
  2. TAG HARNESS FOR IDENTIFICATION.
  1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"
- NOTES: ON ALL LEADS.

## ELECTRIC DOOR HARNESS

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	5
C	.	.	FORK SPACE, #10 STUD, 14-16 GA.	3
B	.	.	FEMALE FAST-ON, 1/8" 14-16 GA. INS	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	.
	VENDOR	PART #	DESCRIPTION	QTY

<b>Thomas</b> SANTOS 2234	52003793 B
HARNESS, ELECTRIC DOOR MOTOR	
End Date: 9/5/02	

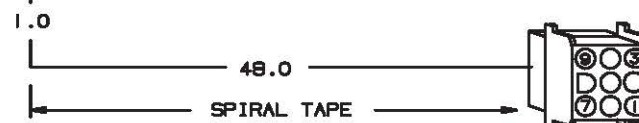
CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLING	99916716001	SWITCH CONNECTOR	1
	PED	12015969	18-20 GA TERMINAL	2
	PED	12015970	14-16 GA TERMINAL	5
31	AMP	770005-1	14-20 GA. TERMINAL, PIN.	8
	AMP	770003-3	10-12 GA. TERMINAL, PIN.	.
	AMP	770028-1	6 POSITION CONNECTOR, CAP.	1
RELAY K1	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

LEAD #	AWG	COLOR	DESCRIPTION
424	16	BLUE/WHITE	FROM LIFT SWITCH TO LIFT RELAY K16.
426	16	GREEN	TO ELECTRIC DOOR HARNESS, OPEN.
427	16	YELLOW	TO ELECTRIC DOOR HARNESS, CLOSE.
434	16	BLACK	TO ELECTRIC DOOR, COMMON MOTOR LEAD.
GND8	16	WHITE	SWITCH HARNESS GROUND, ELECTRIC DOOR.
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+).
GNV/JP	18	GREEN	SWITCH PANEL LIGHTS (-).
.	.	.	.
.	.	.	.
.	.	.	.

CONN. #1  
ELECTRIC DOOR  
HARNESS  
52003139  
(REAR VIEW)

8	7
70	GNV/JP
1	4
.	427
8	8
GND8	434
3	8
424	426

○ RED  
CONNECTOR #31  
(ELECTRIC DOOR)



1	2	3
434	424	.
4	5	6
426	427	.
7	8	9
70	GNV/JP	GND8

5. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
  4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
  3. FULLY TAPE BREAKOUTS FOR 3"-2" SPACING OTHERWISE.
  2. TAG HARNESS FOR IDENTIFICATION.
  1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"
- NOTES: ON ALL LEADS.

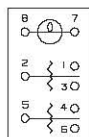
## ELECTRIC DOOR SWITCH HARNESS

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	.
	VENDOR	PART #	DESCRIPTION	QTY

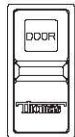
<b>Thomas</b> CABLES • WIRING • ETC.	52003792 B
HARNESS, ELECTRIC DOOR SWITCH	
End Date: 9/5/02	



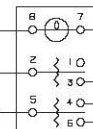
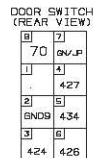
# SWITCH LAYOUT



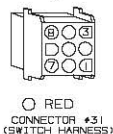
CIRCUIT



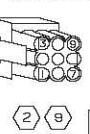
DOOR SWITCH



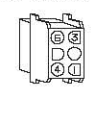
P/N 52003792



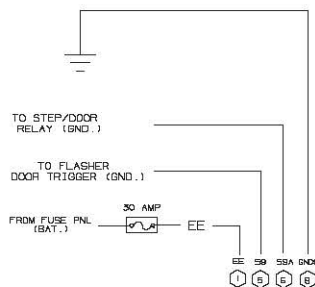
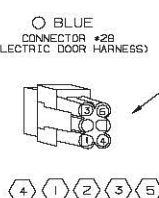
RED  
CONNECTOR #31  
(OPTION HARNESS)  
P/N 52004123



BLUE  
CONNECTOR #28  
(OPTION HARNESS)  
P/N 52004123



P/N 52003793



BLUE  
CONNECTOR #26  
(SWITCH PANEL HARNESS)  
P/N 52004123



BLUE  
CONNECTOR #26  
(OPTION HARNESS CONNECTOR)  
P/N 52004123



POWER RELAY K18  
(OPTION HARNESS)

POWER RELAY K19  
(OPTION HARNESS)

POWER RELAY K20  
(OPTION HARNESS)

DOOR MOTOR  
P/N 64006253

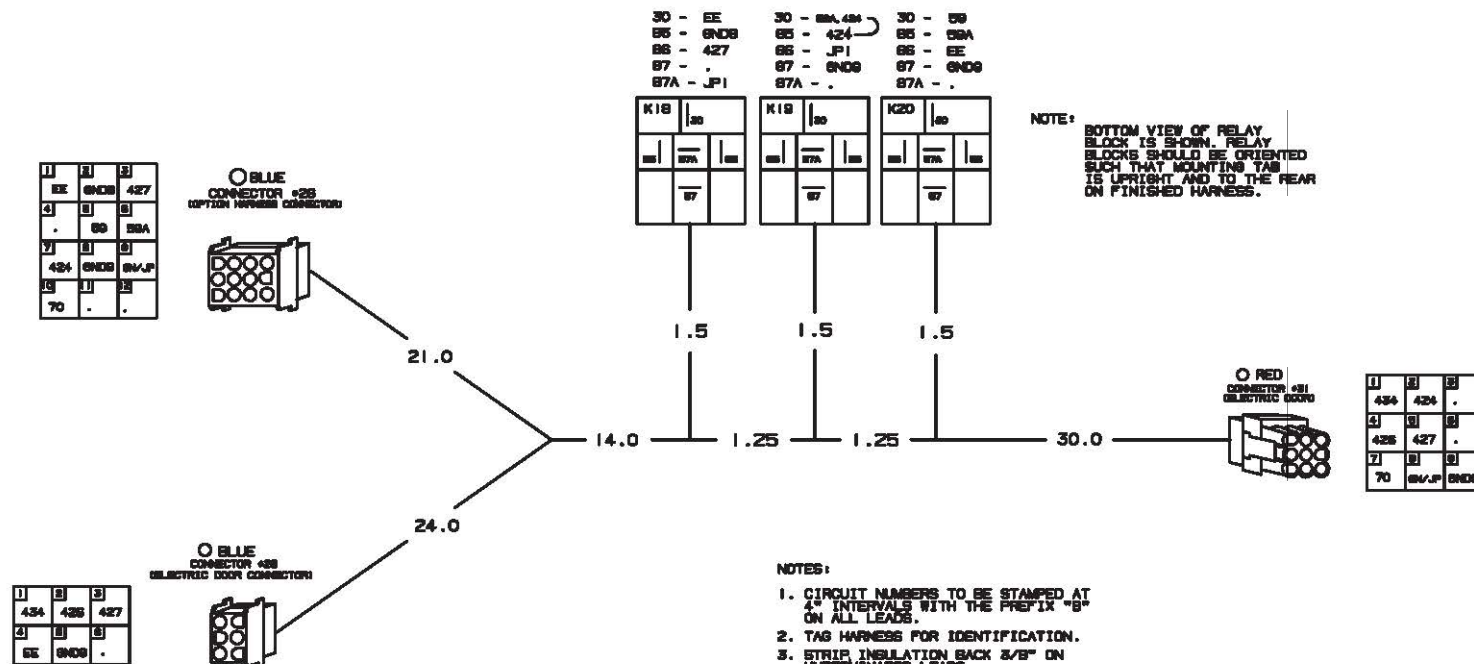
KEY SWITCH- P/N 52001972  
PLATE- P/N 64003837  
DECAL- P/N 64004773

## ELECTRIC DOOR WIRING MINOTOUR SRW, DRW

	52003812 D
ELECTRIC DOOR	
End Date: 9/5/02	

CONN	VENDOR	PART #	DESCRIPTION
26	AMP	770026-1	12 POSITION CONNECTOR, CAP
	AMP	XX	14-16 GA TERMINAL, PIN
	AMP	XX	10-12 TERMINAL, PIN
28	AMP	770027-1	6 POSITION CONNECTOR, CAP
	AMP	XX	14-16 GA TERMINAL, PIN
	AMP	XX	10-12 TERMINAL, PIN
31	AMP	770021-1	9 POSITION CONNECTOR, FLUG
	AMP	XX	14-16 GA TERMINAL, SOCKET
	AMP	XX	10-12 GA TERMINAL, SOCKET
RELAY BLOCKS	HELLA	87122	HOUSING-RELAY, 8 POSITION.
	X	XX	TERMINAL-FEMALE, 1/4", 14-16 GA.
	X	XX	TERMINAL-FEMALE, 1/4", 10-12 GA.

CIR	GA	COLOR	DESCRIPTION
84/P	16	GREEN	SWITCH PANEL LIGHTS (-).
8ND8	16	WHITE	RELAY GROUND (OPTION HARNESS).
8E	16	RED	FROM FUSE PNL. (BAT) TO RELAYS.
70	16	WHITE/BLACK	SWITCH PANEL LIGHTS (+) FEED.
8ND8	16	LIGHT BLUE	ELECTRIC DOOR GROUND, SWITCH AND ACTUATOR.
427	16	YELLOW	TO ELECTRIC DOOR HARNESS, CLOSE.
424	16	BLUE/WHITE	LIFT SWITCH TO LIFT RELAY.
69	16	RED/BLACK	DOOR OPEN SIGNAL TO FLASHER, (-).
58A	16	RED/WHITE	DOOR OPEN SIGNAL TO STEPLIGHT RELAY, (-).
JP1	16	BLACK/WHITE	RELAY BLOCK JUMPER, ELECTRIC DOOR RELAYS.
434	16	BLACK	TO ELECTRIC DOOR ACTUATOR, COMMON LEAD.
426	16	GREEN	TO ELECTRIC DOOR HARNESS, OPEN.



NOTE:  
BOTTOM VIEW OF RELAY BLOCK IS SHOWN. RELAY BLOCKS SHOULD BE ORIENTED SUCH THAT MOUNTING TAB IS UPRIGHT AND TO THE REAR ON FINISHED HARNESS.

#### NOTES:

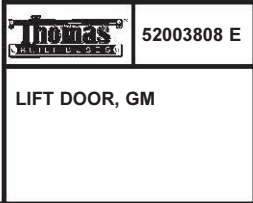
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.
2. TAG HARNESS FOR IDENTIFICATION.
3. STRIP INSULATION BACK 3/8" ON INTERMINATED LEADS.
4. REFER TO DIB #82001138 FOR HARNESS SPECIFICATIONS.
5. FULLY TAPE HARNESS WHERE HEAVY LINES HAVE BEEN SHOWN. IN TAPED AREAS, THE HARNESS MUST BE SMOOTH AND NON-TWISTED.
6. USE WIRE TIES TO HOLD HARNESS WHERE NEEDED, MINIMUM AMOUNT AND SIZE.
7. CONNECTORS AND BREAK-OUTS MUST FACE AS INDICATED ON THE DRAWING.
8. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
9. CONNECTOR #31 SHOULD BE TAPPED "ELECTRIC DOOR", TAG 1 INCH BEFORE CONN. BODY.

<b>Thomas</b> SOLUTIONS	52004123 C
HARNESS, OPTION INTERFACE, ELECTRIC DOOR	
End Date: 9/5/02	





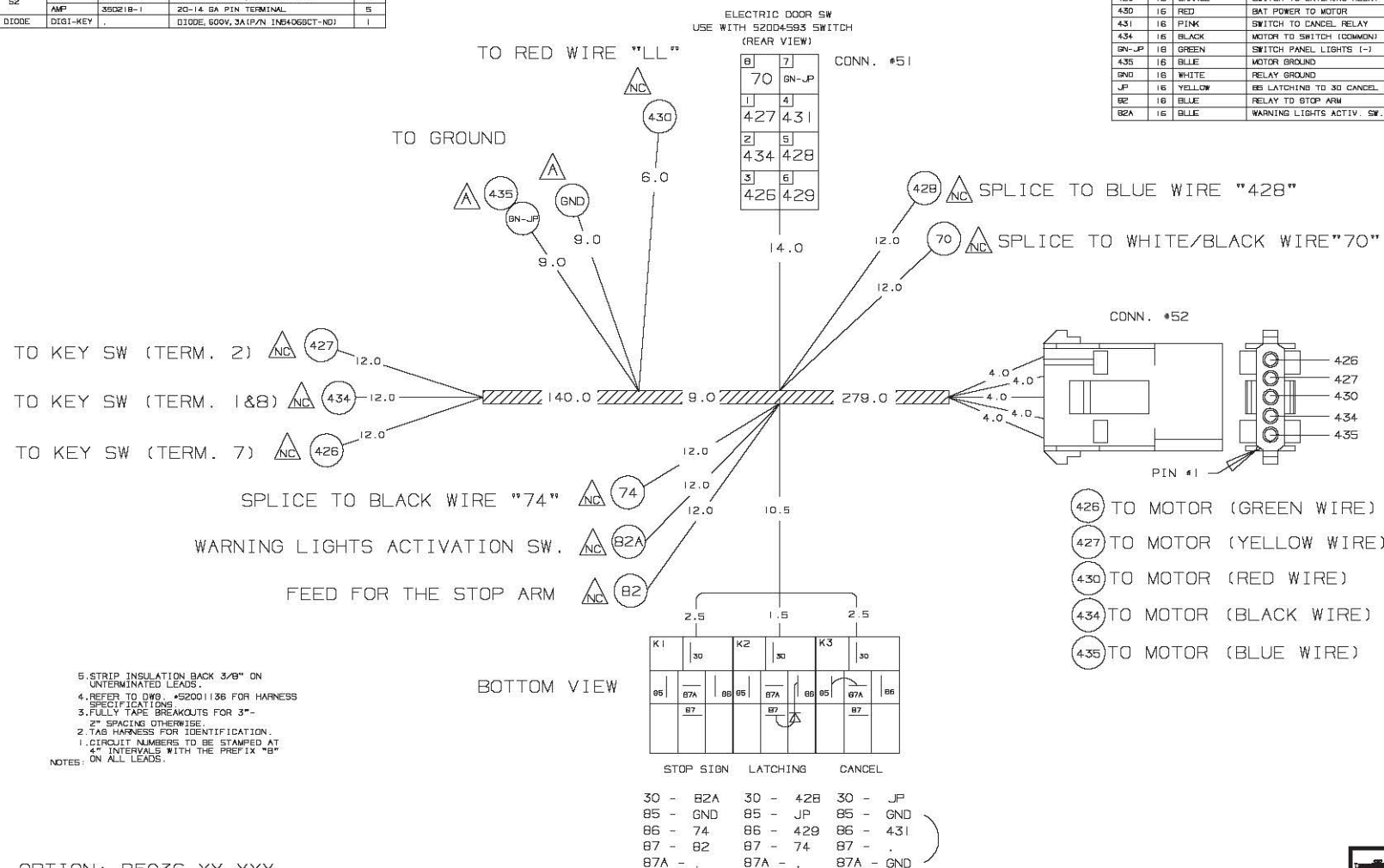






CONN	VENDOR	PART #	DESCRIPTION	QTY
S1	CARLING	98016716001	SWITCH CONNECTOR	1
	PED	12084590	10-12 GA TERMINAL	0
	PED	12015870	14-16 GA TERMINAL	8
K1, K2, K3	HELA	87122	RELAY BLOCK	3
	INTERLOCK	JBC-1230-1	TERMINAL FOR RELAY BLOCK	12
S2	AMP	350810-1	CONNECTOR CAP, MATE-N-LOCK	2
	AMP	350218-1	20-14 GA PIN TERMINAL	5
DIODE	DIOT-KEY	.	DIODE, 600V, 3A(P/N 1N6406BCT-N0)	1

LEAD #	AWG	COLOR	DESCRIPTION
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+)
74	16	BLACK	STEPWELL LIGHTS
426	16	GREEN	SWITCH TO MOTOR (DOOR OPEN)
427	16	YELLOW	SWITCH TO MOTOR (DOOR CLOSE)
428	18	BLUE	12V IGN POWER TO SWITCH
429	16	ORANGE	SWITCH TO LATCHING RELAY
430	16	RED	BAT POWER TO MOTOR
431	16	PINK	SWITCH TO CANCEL RELAY
434	16	BLACK	MOTOR TO SWITCH (COMMON)
GN-JP	18	GREEN	SWITCH PANEL LIGHTS (-)
435	16	BLUE	MOTOR GROUND
GND	16	WHITE	RELAY GROUND
JP	16	YELLOW	85 LATCHING TO 30 CANCEL RELAYS
82	16	BLUE	RELAY TO STOP ARM
82A	16	BLUE	WARNING LIGHTS ACTIV. SW. TO RELAY



OPTION: B5036-XX-XXX

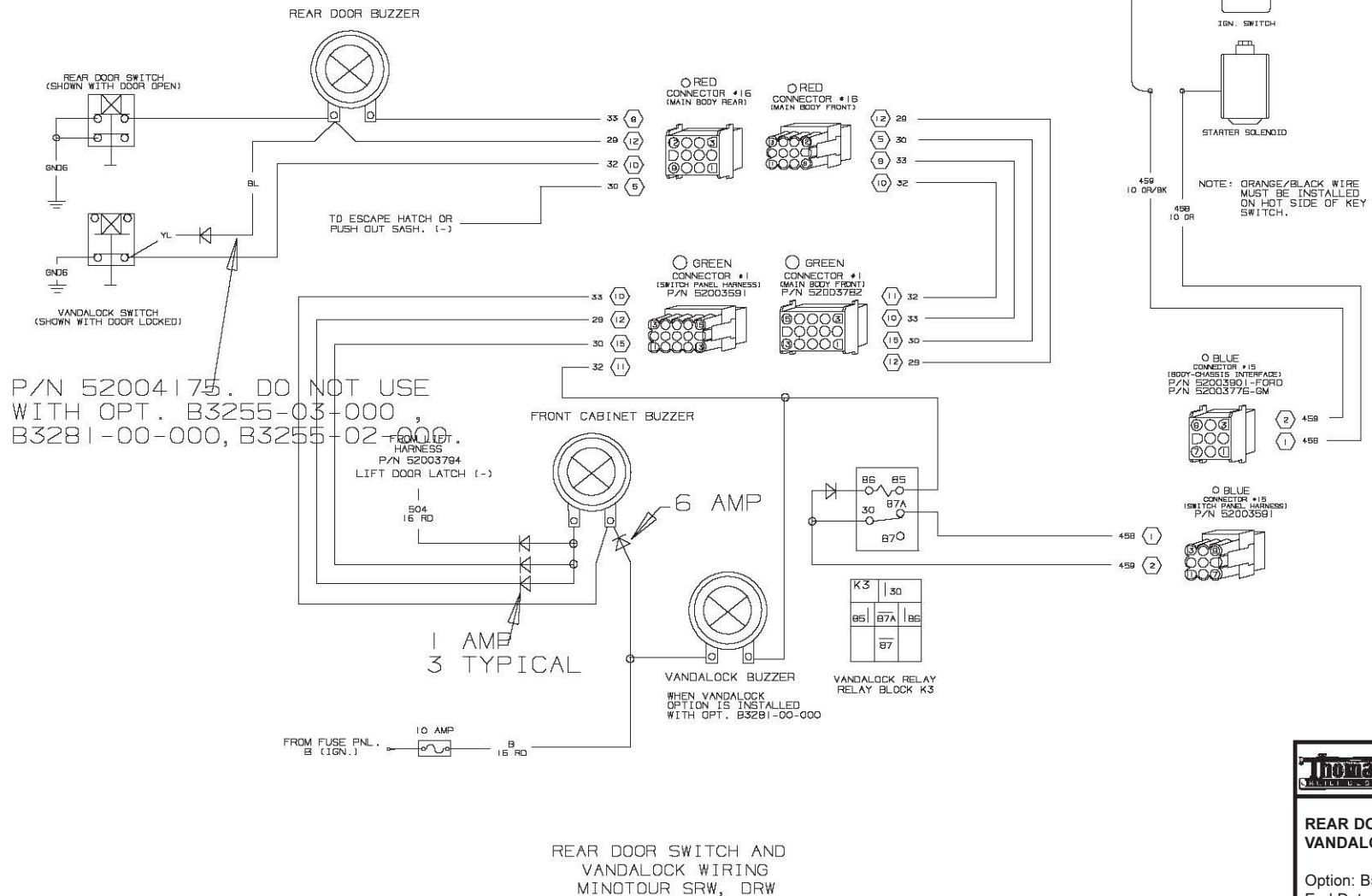
DESCRIPTION	QTY
A *10 RING TERMINAL, 14-16 GA.	2

<b>Thomas</b> CABLE & WIRE	<b>52003255 B</b>
<b>HARNESS, ELECTRIC ENTRANCE DOOR, w/VANDALOCK</b>	



## SYSTEM OPERATION REAR DOOR AND VANDALOCK

1. BUZZER AT REAR DOOR (IF INSTALLED) AND IN SWITCH CABINET TO ACTIVATE IF REAR DOOR LATCH IS OPEN OR VANDALOCK IS IN LOCK POSITION.
2. IF VANDALOCK IS INSTALLED, WHEN IN LOCKED POSITION THE STARTER CIRCUIT ON CHASSIS WILL BE INTERRUPTED AND WILL NOT ALLOW ENGINE TO START.



52003930 E

### REAR DOOR AND VANDALOCK

Option: B5185-02-000  
End Date: 9/6/02

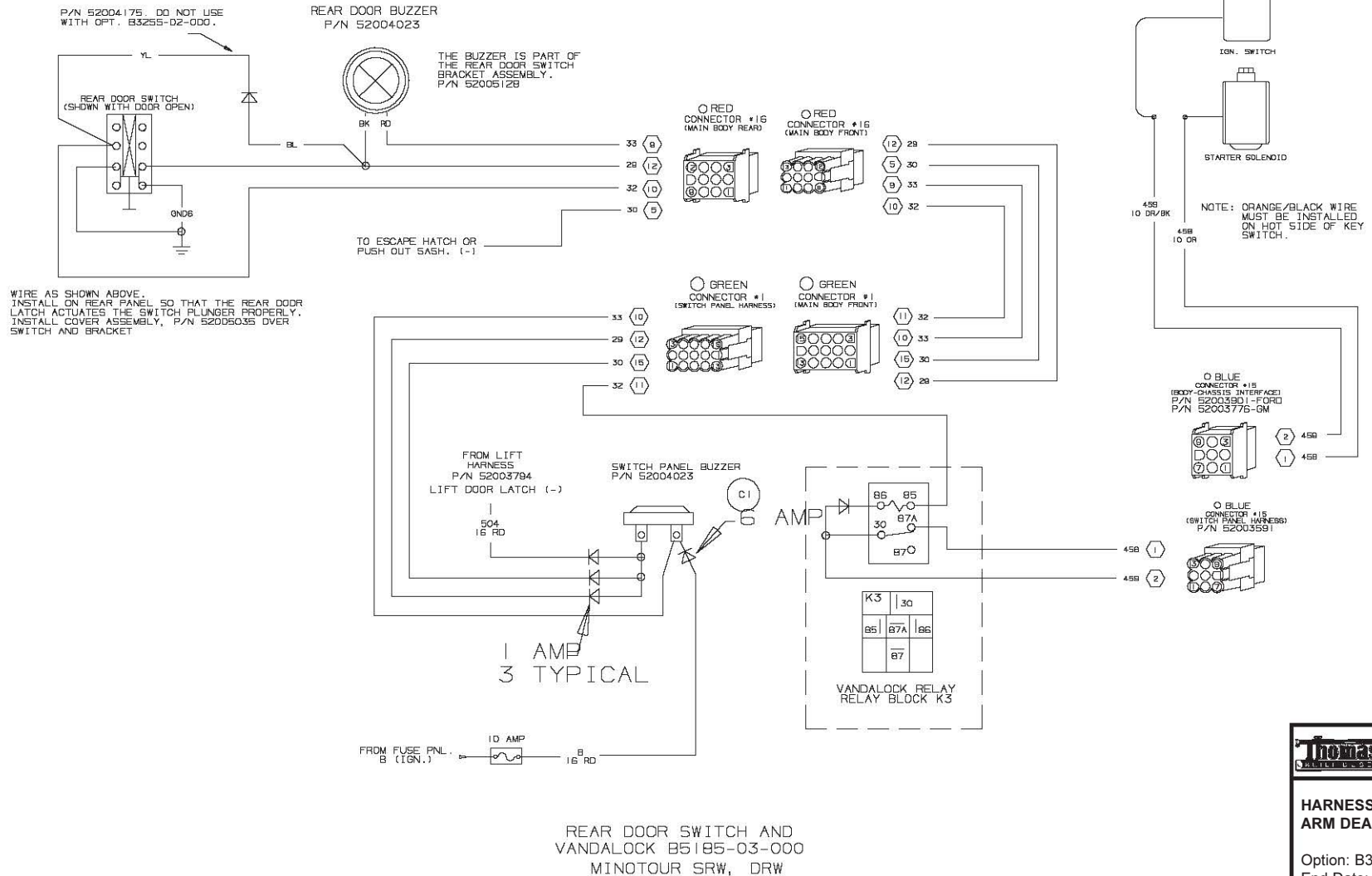


NOTES:

**VANDALOCK  
SECTION**

## SYSTEM OPERATION REAR DOOR AND VANDALOCK

1. BUZZER AT REAR DOOR (IF INSTALLED) AND IN SWITCH CABINET TO ACTIVATE IF REAR DOOR LATCH IS OPEN OR VANDALOCK IS IN LOCK POSITION.
2. IF VANDALOCK IS INSTALLED, WHEN IN LOCKED POSITION THE STARTER CIRCUIT ON CHASSIS WILL BE INTERRUPTED AND WILL NOT ALLOW ENGINE TO START.



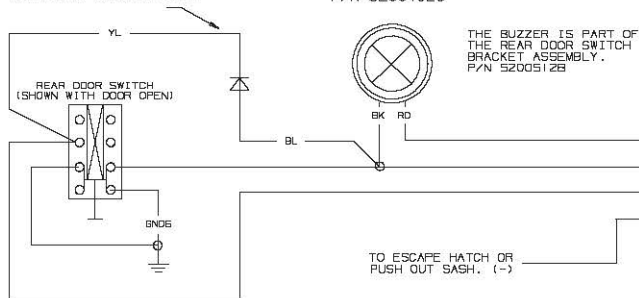
<b>Thomas</b> CROSSING	<b>52004183 D</b>
<b>HARNESS, CROSSING ARM DEACTIVATION</b>	
Option: B3831-00-000 End Date: 9/5/02	

## SYSTEM OPERATION REAR DOOR AND VANDALOCK

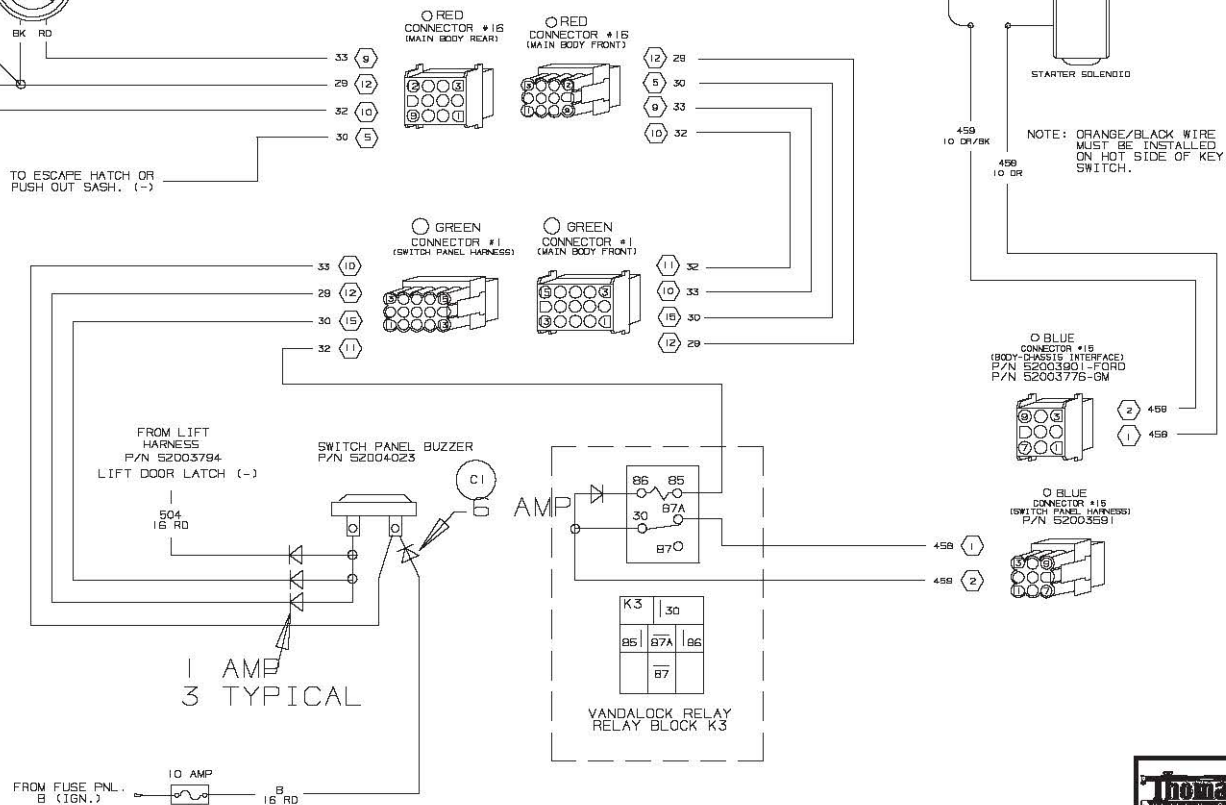
1. BUZZER AT REAR DOOR (IF INSTALLED) AND IN SWITCH CABINET TO ACTIVATE IF REAR DOOR LATCH IS OPEN OR VANDALOCK IS IN LOCK POSITION.
2. IF VANDALOCK IS INSTALLED, WHEN IN LOCKED POSITION THE STARTER CIRCUIT ON CHASSIS WILL BE INTERRUPTED AND WILL NOT ALLOW ENGINE TO START.

P/N 52004175. DO NOT USE WITH OPT. B3265-02-000.

REAR DOOR BUZZER  
P/N 52004023



WIRE AS SHOWN ABOVE. INSTALL ON REAR PANEL SO THAT THE REAR DOOR LATCH ACTUATES THE SWITCH PLUNGER PROPERLY. INSTALL COVER ASSEMBLY, P/N 52005035 OVER SWITCH AND BRACKET.



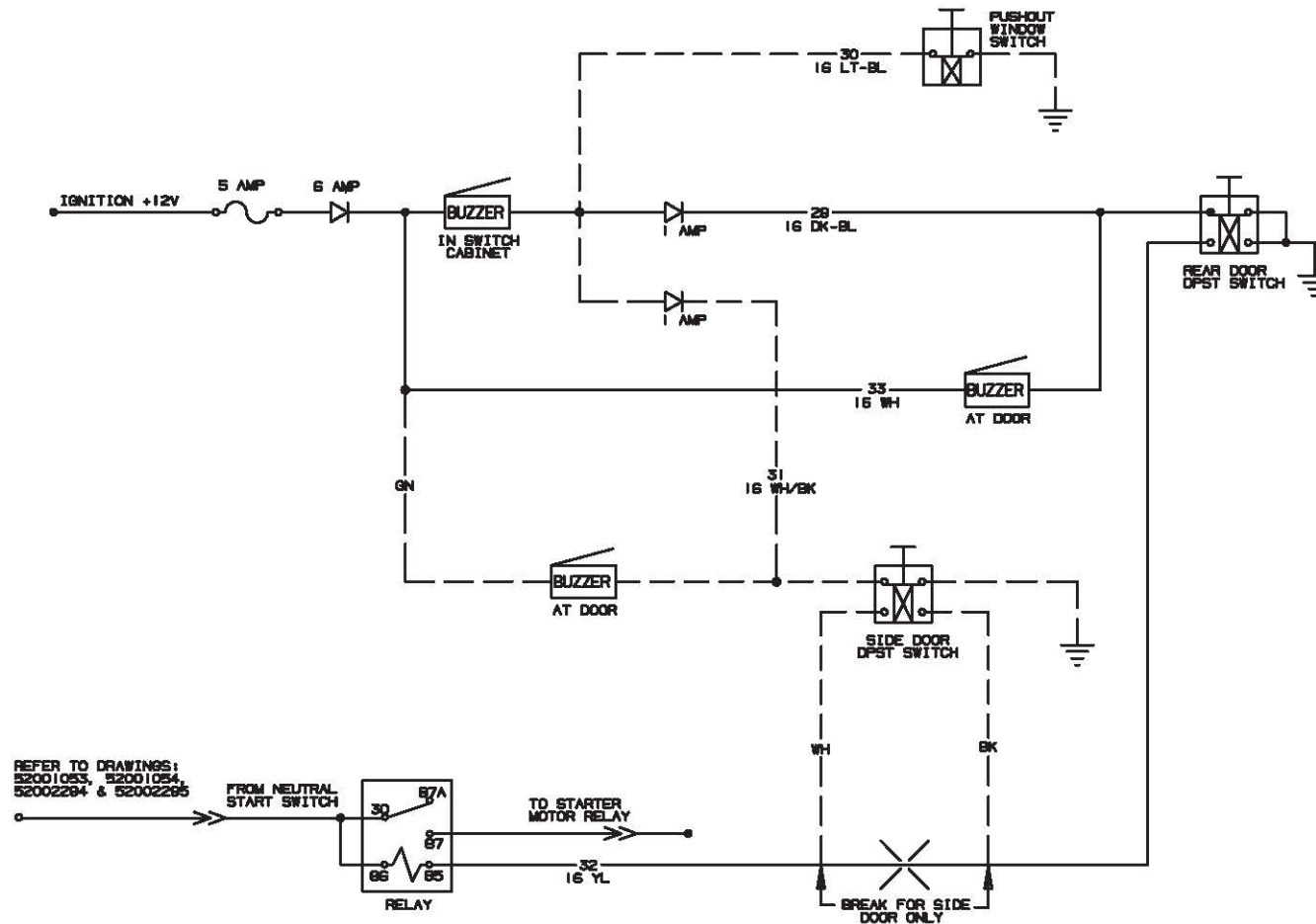
REAR DOOR SWITCH AND  
VANDALOCK B5185-03-000  
MINOTOUR SRW, DRW



52004183 D

### VANDALOCK

Option: B5185-03-000  
End Date: 9/6/02




NOTE:

DASHED LINES DENOTE OPTIONAL EQUIPMENT.

DECAL PART NUMBER: 52002537

OVERALL DECAL SIZE: 5" x 7.5"

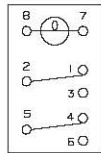
ON EF AND ER MODELS, CONNECT HARNESS 52001862 TO CONNECTOR ON 4B WIRE IN SIDE PANEL. MOUNT RELAY ON BODY ELECTRICAL PANEL.

	52004175 A
HARNESS, JUMPER VANDALOCK  End Date: 9/6/02	

**RADIO  
SECTION**



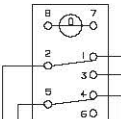
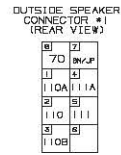
# SWITCH LAYOUT



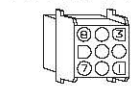
CIRCUIT



OUTSIDE SPEAKER



GREEN CONNECTOR #24  
P/N 52004124

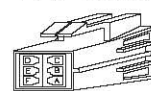


GREEN CONNECTOR #24  
(SWITCH HARNESS)



P/N 52003800

CONNECTOR #30  
P/N 52004124

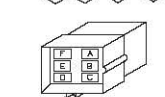


CONNECTOR #30  
(SPEAKER HARNESS OUTPUT)

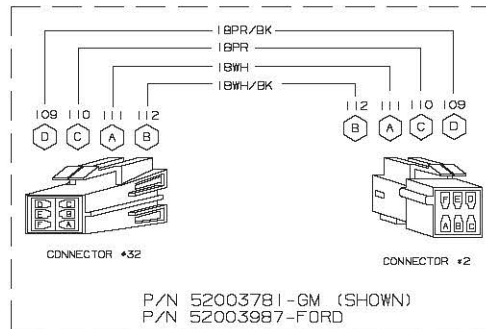


NOTE:  
WHEN INSTALLING SPEAKERS  
WITHOUT OPT. B2580-00-X00,  
CONNECTOR 32 MATES DIRECTLY  
WITH CONNECTOR #30.

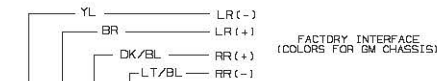
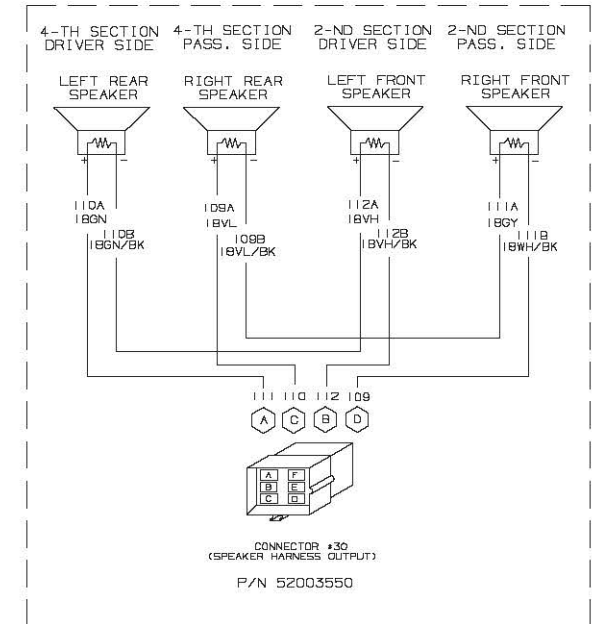
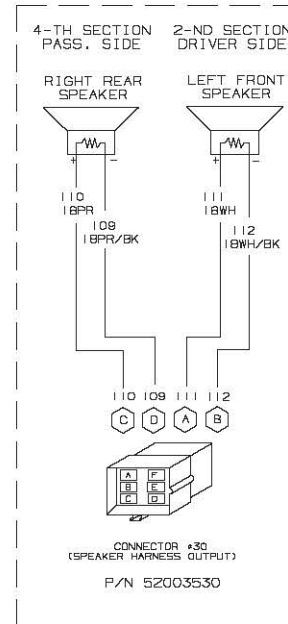
CONNECTOR #32  
P/N 52004124



CONNECTOR #32  
P/N 52004124



P/N 52003781-GM (SHOWN)  
P/N 52003987-FORD



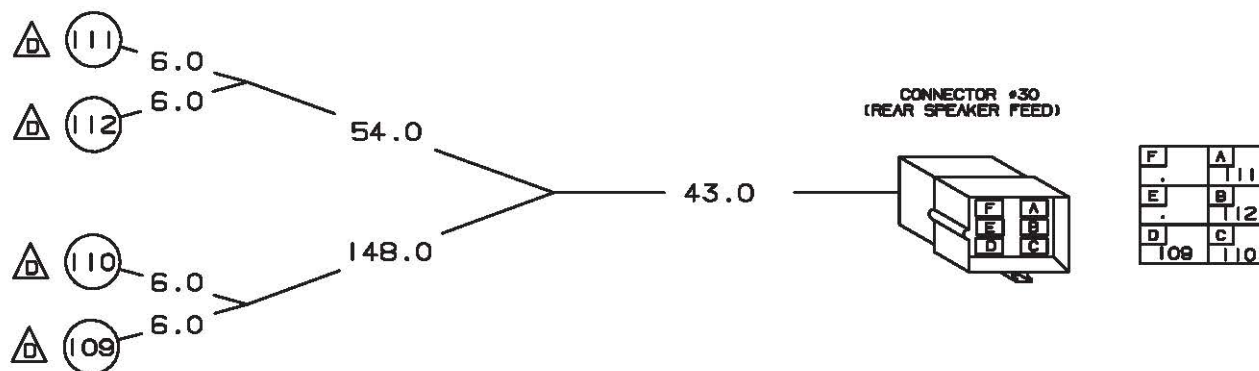
CONNECTOR LOCATED IN  
DRIVER'S B PILLAR ON  
GM CHASSIS ONLY.

NO CONNECTOR PROVIDED ON  
FORD MODEL. HARNESS 52002987  
SHOULD BE RAN TO THE REAR  
OF RADIO AND SPLICED INTO  
THE REAR SPEAKER OUTPUTS,  
FORD CHASSIS ONLY.

<b>Thomas</b> SOUND SYSTEMS	<b>52003834 D</b>
<b>SPEAKER</b>	
End Date: 9/6/02	

CONN	VENDOR	PART #	DESCRIPTION	QTY
30	PED	12064754	CONN. 6M, METRI PACK 280 SERIES	1
	PED	12034047	TERMINALS FOR CONNECTOR	4
	PED	12064755	SECONDARY LOCK TAB FOR CONNECTOR	2

LEAD #	AWG	COLOR	DESCRIPTION
109	18	PURPLE/BLACK	RIGHT REAR SPEAKER (-)
110	18	PURPLE	RIGHT REAR SPEAKER (+)
111	18	WHITE	LEFT FRONT SPEAKER (+)
112	18	WHITE/BLACK	LEFT FRONT SPEAKER (-)



E	.	.	.	.
D	.	.	FEMALE PUSH-ON, 1/4", 18 GA.	4
C	.	.	.	.
B	.	.	.	.
A	.	.	.	.
	VENDOR	PART #	DESCRIPTION	QTY

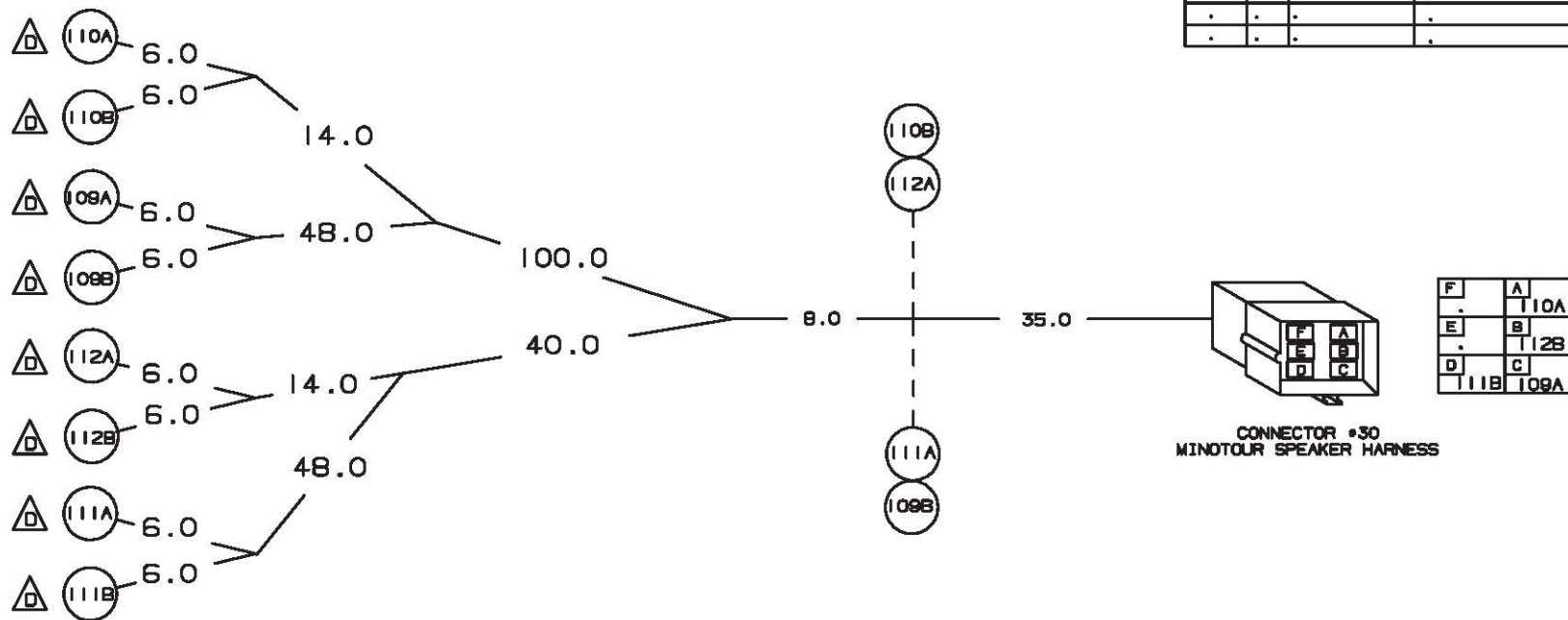
6. SPOT TAPE HARNESS EVERY 8-9".  
 5. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.  
 4. REFER TO DRW. #52001136 FOR HARNESS SPECIFICATIONS.  
 3. FULLY TAPE BREAKOUTS FOR 3"-2" SPACING OTHERWISE.  
 2. TAB HARNESS FOR IDENTIFICATION.  
 1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.

NOTES:

<b>Thomas</b> SOUND & VIDEO	52003530 D
HARNESS, TWO SPEAKERS IN SRW AND DRW	
End Date: 9/6/02	

CONN	VENDOR	PART #	DESCRIPTION	QTY
30	PED	12064754	CONN. 6M, METRI PACK 280 SERIES	1
	PED	12034047	TERMINALS FOR CONNECTOR	4
	PED	12064755	SECONDARY LOCK TAB FOR CONNECTOR	2

LEAD #	AWG	COLOR	DESCRIPTION
109A	18	VIOLET	RIGHT REAR SPEAKER (+)
109B	18	VIOLET/BLACK	RIGHT REAR SPEAKER (-)
110A	18	GREEN	LEFT REAR SPEAKER (+)
110B	18	GREEN/BLACK	LEFT REAR SPEAKER (-)
111A	18	GRAY	RIGHT FRONT SPEAKER (+)
111B	18	GRAY/BLACK	RIGHT FRONT SPEAKER (-)
112A	18	WHITE	LEFT FRONT SPEAKER (+)
112B	18	WHITE/BLACK	LEFT FRONT SPEAKER (-)
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.



E	.	.	.	.
D	.	.	FEMALE PUSH-ON, 1/4", 18 GA.	8
C	.	.	.	.
B	.	.	.	.
A	.	.	.	.
	VENDOR	PART #	DESCRIPTION	QTY

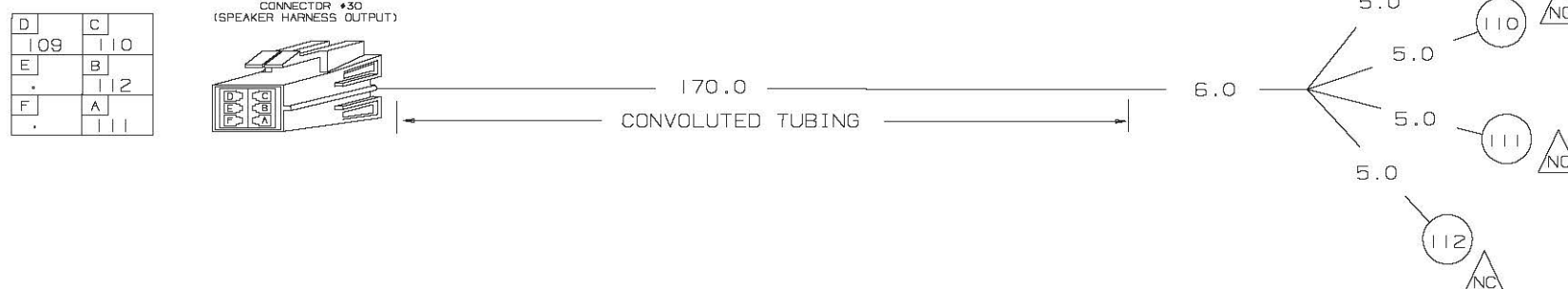
5. SPOT TAPE ENTIRE HARNESS EVERY 6-8".  
 4. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.  
 3. REFER TO DWS. #52001136 FOR HARNESS SPECIFICATIONS.  
 2. TAG HARNESS FOR IDENTIFICATION.  
 1. CIRCUIT NUMBERS TO BE STAMPED AT 12" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.

NOTES:

<b>Thomas</b> CABLE MANAGEMENT	52003550 C
HARNESS, FOUR SPEAKERS DRW AND SRW	
End Date: 9/6/02	


CONN	VENDOR	PART #	DESCRIPTION	QTY
30	PED	12064752	CONN. 6F. METRI PACK 280 SERIES	1
	PED	12034046	TERMINALS FOR CONNECTOR	4
	PED	12064753	SECONDARY LOCK TAB FOR CONNECTOR	2

LEAD #	AWG	COLOR	DESCRIPTION
109	18	PURPLE/BLACK	RIGHT SPEAKER (-)
110	18	PURPLE	RIGHT SPEAKER (+)
111	18	WHITE	LEFT SPEAKER (+)
112	18	WHITE/BLACK	LEFT SPEAKER (-)



5. STRIP INSULATION BACK 3/8" ON NON-TERMINATED LEADS.
  4. TAPE CONVOLUTED TUBING TO HARNESS ON ENDS.
  - SPECIFICATIONS.
  3. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
  2. TAG HARNESS FOR IDENTIFICATION.
  1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"
- NOTES: ON ALL LEADS.

A	.	.	BUTT SPLICE, 14-16 GA., INSULATED	D
CONN.	VENDOR	VENDOR NO.	DESCRIPTION	QTY.

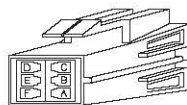
	52003987 A
HARNESS, SPEAKER INTERFACE, FORD	

CONN	VENDOR	PART #	DESCRIPTION	QTY
30	PED	12064752	CONN. 6F, METRI PACK 280 SERIES	1
	PED	12034046	TERMINALS FOR CONNECTOR	4
	PED	12064753	SECONDARY LOCK TAB FOR CONNECTOR	2
2	PED	12064762	CONN. 6F, METRI PACK 150 SERIES	1
	PED	12047767	TERMINALS FOR CONNECTOR	4
	PED	12064764	SECONDARY LOCK TAB FOR CONNECTOR	2

LEAD #	AWG	COLOR	DESCRIPTION
109	18	PURPLE/BLACK	RIGHT SPEAKER (-)
110	18	PURPLE	RIGHT SPEAKER (+)
111	18	WHITE	LEFT SPEAKER (+)
112	18	WHITE/BLACK	LEFT SPEAKER (-)

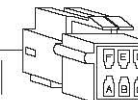
D	C
109	110
E	B
.	112
F	A
.	111

CONNECTOR #30  
(SPEAKER HARNESS OUTPUT)




96.0  
CONVOLUTED TUBING

CONN. #2  
FACTORY INTERFACE  
Y-PILLAR (GM ONLY)



D	C
109	110
E	B
.	112
F	A
.	111

4. TAPE CONVOLUTED TUBING TO HARNESS ON ENDS.  
SPECIFICATIONS.
  3. REFER TO DWG. #52001136 FOR HARNESS  
SPECIFICATIONS.
  2. TAG HARNESS FOR IDENTIFICATION.
  1. CIRCUIT NUMBERS TO BE STAMPED AT  
4" INTERVALS WITH THE PREFIX "B"
- NOTES: ON ALL LEADS...

	52003781 C
HARNESS, SPEAKER INTERFACE, GM	
End Date: 9/6/02	

CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLING	99918718001	SWITCH CONNECTOR	1
	PED	12019969	18-20 GA TERMINAL	2
	PED	12019870	14-16 GA TERMINAL	5
	PED	12084580	10-12 GA. TERMINAL	.
24	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	7
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	.
	AMP	770021-1	9 POSITION CONNECTOR, PLUG.	1
RELAY K1	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

LEAD #	AWG	COLOR	DESCRIPTION
70	18	WHITE/BLACK	SWITCH PANEL LIGHTS (+).
GNVJP	18	GREEN	SWITCH PANEL LIGHTS (-).
110	16	PURPLE	SPEAKER FEED, RIGHT (+).
111	16	WHITE	SPEAKER FEED, LEFT (+).
110A	16	PURPLE	RIGHT SPEAKER FEED, (+).
110B	16	GREEN	EXTERNAL SPEAKER FEED, (+).
111A	16	WHITE	LEFT SPEAKER FEED, (+).
.	.	.	.

CONN. #1  
OUTSIDE SPEAKER  
SWITCH  
52003057  
(REAR VIEW)

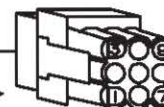
1	2
70	GNVJP
1	4
110A	111A
3	5
110	111
3	5
110B	

1.0

48.0

SPIRAL TAPE

GREEN  
CONNECTOR #24  
(OUTSIDE SPEAKER)



1	2	3
110	111	110A
4	5	6
110B	111A	70
7	8	9
GNVJP	.	.

5. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
  4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
  3. FULLY TAPE BREAKOUTS FOR 3"-2" SPACING OTHERWISE.
  2. TAG HARNESS FOR IDENTIFICATION.
  1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"
- NOTES: ON ALL LEADS.

## OUTSIDE SPEAKER HARNESS OPTION B2580-0X-000

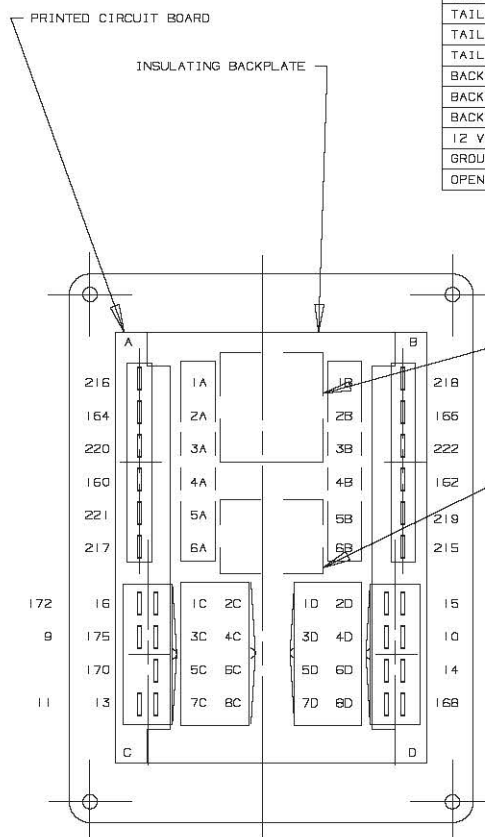
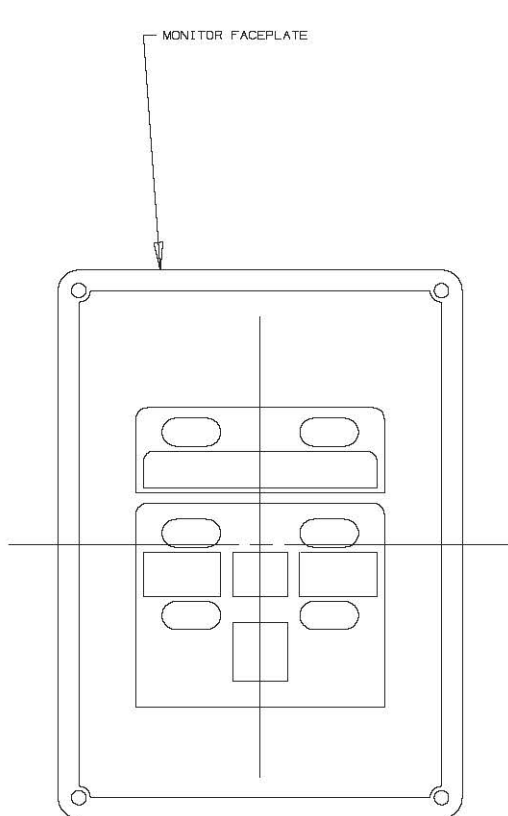
D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE REDEP., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	.
	VENDOR	PART #	DESCRIPTION	QTY

<b>Thomas</b> SANTALINI 2023	52003800 A
HARNESS, OUTSIDE SPEAKER SWITCH	



NOTES:

**MISCELLANEOUS  
SECTION**



LAMP FUNCTION:	DORAN #	TBB CIR #	OLD TBB CIR #	TBB COLD.R	OLD TBB COLD.R
RED WARNING LAMP RIGHT INPUT	4A	160	160	BK	BK
RED WARNING LAMP RIGHT FRONT OUTPUT	1A	216	2	BR	BR
RED WARNING LAMP RIGHT REAR OUTPUT	6A	217	3	OR	OR
AMBER WARNING LAMP RIGHT INPUT	2A	164	164	BL	YE/BL
AMBER WARNING LAMP RIGHT FRONT OUTPUT	3A	220	5	WH	WH
AMBER WARNING LAMP RIGHT REAR OUTPUT	5A	221	7	RD	RD
RED WARNING LAMP LEFT INPUT	4B	162	162	OR	RD/BL
RED WARNING LAMP LEFT FRONT OUTPUT	1B	218	4	YE	YE
RED WARNING LAMP LEFT REAR OUTPUT	6B	215	1	BK	BK
AMBER WARNING LAMP LEFT INPUT	2B	166	166	RD	YE/BK
AMBER WARNING LAMP LEFT FRONT OUTPUT	3B	222	8	OR	GR
AMBER WARNING LAMP LEFT REAR OUTPUT	5B	219	5	BL	BL
TURN SIGNAL LAMP RIGHT REAR OUTPUT	3C	9	9	OR	GR
TURN SIGNAL LAMP RIGHT REAR INPUT	4C	175	175	OR	GR
TURN SIGNAL LAMP LEFT REAR INPUT	2D	174	174	YE	YE
TURN SIGNAL LAMP LEFT REAR OUTPUT	3D	10	10	YE	YE
STOP LAMP - INPUT	1C	172	172	RD	RD
STOP LAMP RIGHT - OUTPUT	2C	16	16	RD/WH	RD/WH
STOP LAMP LEFT - OUTPUT	1D	15	15	RD	RD
TAIL LAMP - INPUT	7D	168	168	BR	BR
TAIL LAMP RIGHT - OUTPUT	7C	11	11	BR	BR
TAIL LAMP LEFT - OUTPUT	8D	12	12	BR/WH	BR/WH
BACK-UP LAMP - INPUT	6C	170	170	BL	BL
BACK-UP LAMP RIGHT OUTPUT	5C	13	13	BL	BL
BACK-UP LAMP LEFT OUTPUT	5D	14	14	BL/WH	BL/WH
12 VOLT D.C. POSITIVE	4D	176	176	BK	BK
GROUND	6D	177	177	WH	WH
OPEN CAVITY	5C	-----	-----	-----	-----

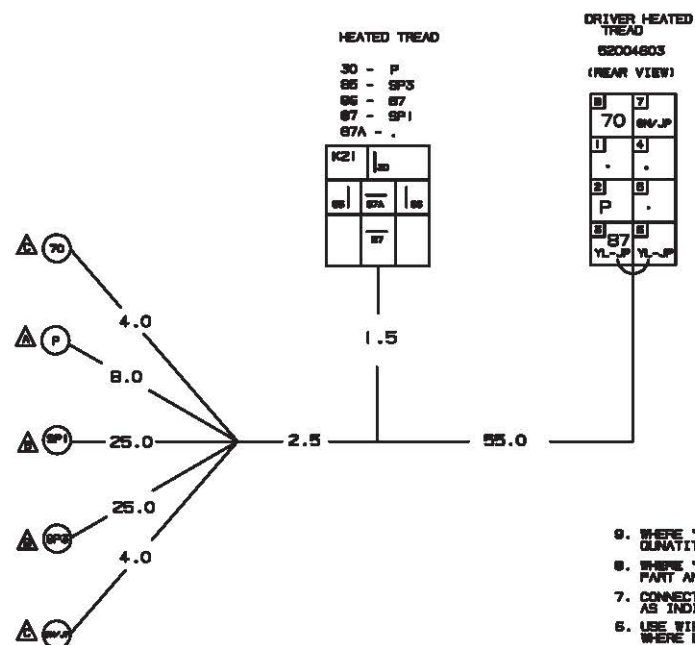


INSTALLATION, DORAN  
MONITOR

End Date: 9/10/01

CONN	VENDOR	PART #	DESCRIPTION	QTY
I	CARLING	99016718001	SWITCH CONNECTOR	1
	PED	XX	18-20 GA TERMINAL	X
	PED	XX	14-16 GA TERMINAL	X
	HELLA	67122	HOUSING-RELAY, 6 POSITION.	1
RELAY BLOCK	X	XX	TERMINAL-FEMALE, 1/4", 14-16 GA.	X
	X	XX	TERMINAL-FEMALE, 1/4", 10-12 GA.	X

CIR	GA	COLOR	DESCRIPTION
SW-JP	16	GREEN	SWITCH PANEL LIGHTS (-).
70	16	WHITE/BLACK	SWITCH PANEL LIGHTS (+) FEED.
P	16	RED	FROM FUSE PNL. (IGN) TO RELAY.
87	16	YELLOW	FEED FROM SWITCH TO RELAY.
SP1	14	BLACK/YELLOW	SPARE-RELAY TO STEP HEATER.
SP3	16	BLACK/WHITE	SPARE-RELAY TO THERMOSTAT.
YL-JP	16	YELLOW	JUMPER IN SWITCH.
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.



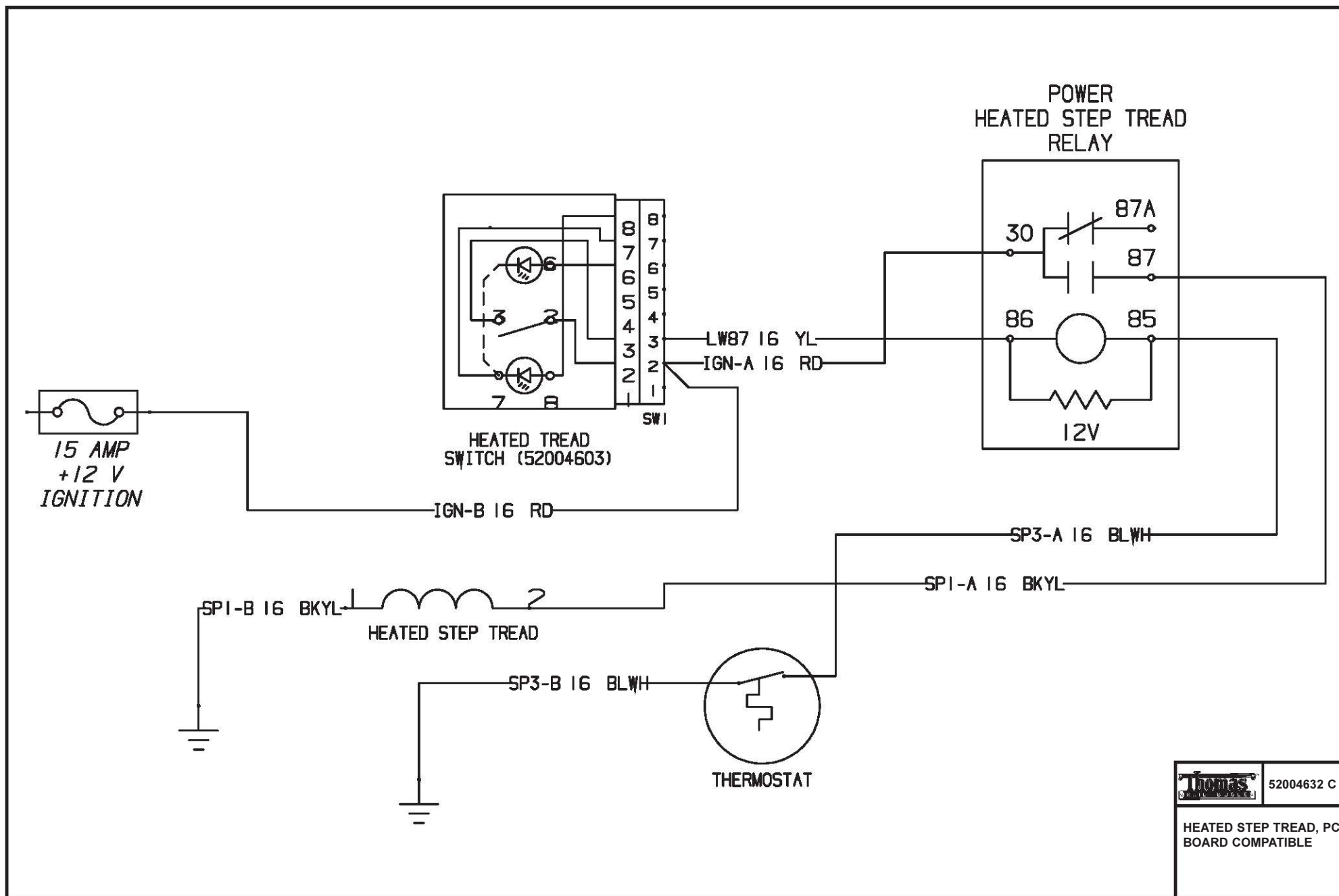
NOTE:  
BOTTOM VIEW OF RELAY  
BLOCK IS SHOWN. RELAY  
BLOCKS SHOULD BE ORIENTED  
SUCH THAT MOUNTING TAB  
IS UPRIGHT AND TO THE REAR  
ON FINISHED HARNESS.


C	BUTT-SPLICE, 16-14 AWG.	2
B	TERMINAL-PIN, 14-16 GA (AMP#770005-1, OR EQV.)	2
A	FEMALE FAST-ON 1/4" 14-16 GA	1
TERM	DESCRIPTION	QTY

- WHERE "X" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEEDED FOR TERMINATION.
- WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
- CONNECTORS AND BREAK-OUTS MUST FACE AS INDICATED ON THE DRAWING.
- USE WIRE TIES TO HOLD HARNESS WHERE NEEDED, MINIMUM AMOUNT AND SIZE.
- PULLY TAPE HARNESS WHERE HEAVY LINES HAVE BEEN SHOWN. IN TAPED AREAS, THE HARNESS MUST BE SMOOTH AND NON-TWISTED.
- REFER TO DWS #52001136 FOR HARNESS SPECIFICATIONS.
- STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
- TAB HARNESS FOR IDENTIFICATION.
- CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.

NOTES:

	52004605 E
HARNESS, STEP TREAD	
End Date: 9/5/02	



	52004632 C
HEATED STEP TREAD, PC BOARD COMPATIBLE	

CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLING	88816718001	SWITCH CONNECTOR	1
	PED	XX	18-20 GA TERMINAL	X
	PED	XX	14-16 GA TERMINAL	X
35	AMP	XX	14-20 GA. TERMINAL, PIN.	X
	AMP	XX	10-12 GA. TERMINAL, PIN.	X
	AMP	770026-1	4 POSITION CONNECTOR, CAP.	1

LEAD #	AWG	COLOR	DESCRIPTION
601	18	BLUE	ESCAPE HATCH FAN FEED (+).
GN/JP	18	GREEN	SWITCH LIGHT GROUND.
70	18	WHITE/BLACK	SWITCH LIGHT FEED (+).
J	16	RED	FROM FUSE PANEL (IGN.), ACC. POWER.

CONN. #1  
(HATCH FAN)  
REAR VIEW SHOWN

8	7
70	GN/JP
1	4
.	.
2	8
J	.
3	8
601	.

1.0

48.0

← SPIRAL TAPE →

○ BLUE  
CONNECTOR #35  
(HATCH FAN)



1	2	3	4
J	601	70	GN/JP

#### NOTES:

1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "8" ON ALL LEADS.
2. TAG HARNESS FOR IDENTIFICATION.
3. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
4. SPIRAL TAPE SPACING SHOULD BE 1 INCH.
5. WHERE "X" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEED FOR TERMINATION.
6. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
7. CONNECTOR 35 SHOULD BE TAGGED APPROPRIATELY 1 INCH FROM CONNECTOR BODY.  
EXAMPLE: CONN. 35 TAG SHOULD READ "HATCH FAN"
8. CONNECTOR 1 SHOULD BE TAGGED APPROPRIATELY. PLACE TAG ON CONNECTOR BODY.
9. USE WIRE TIES TO HOLD HARNESS WHERE NEEDED, MINIMUM AMOUNT AND SIZE.

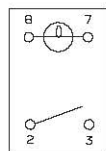


HARNESS, ESCAPE  
HATCH FAN SWITCH

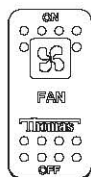
Effective Date: 5/14/01  
End Date: 9/5/01



# SWITCH LAYOUT

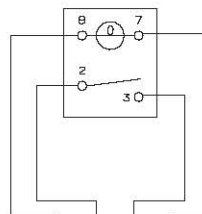
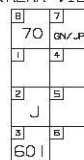


CIRCUIT

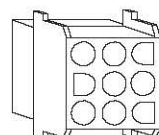


FAN SWITCH

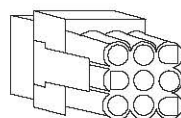
CONNECTOR #1  
HATCH FAN  
(REAR VIEW)



70 J 601 GN/JP  
2 1 4 3

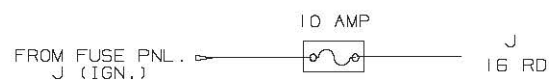


○ BLUE  
CONNECTOR #36  
(HATCH FAN, I.D. SIGN,  
ENG. COMP., LIGHT)



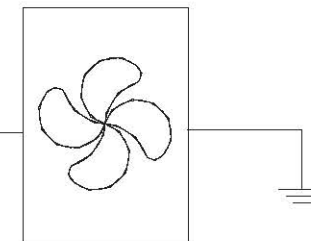
○ BLUE  
CONNECTOR #36  
(HATCH FAN, I.D. SIGN,  
ENG. COMP. LIGHT)

1 4  
J 601



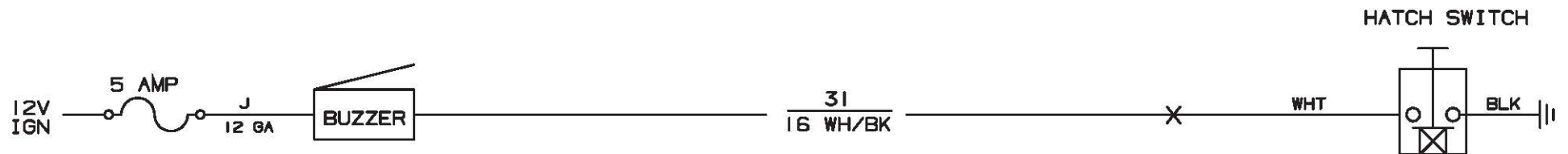
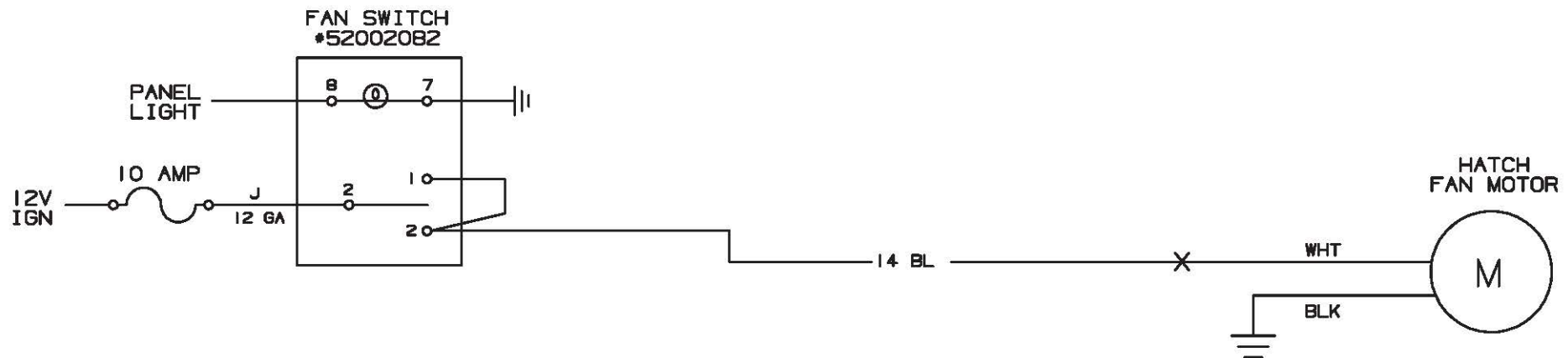
DROP-OUT #601 LOCATED IN  
ELECTRICAL CABINET


## ESCAPE HATCH



16 BL

	52004783 B
ESCAPE HATCH FAN	



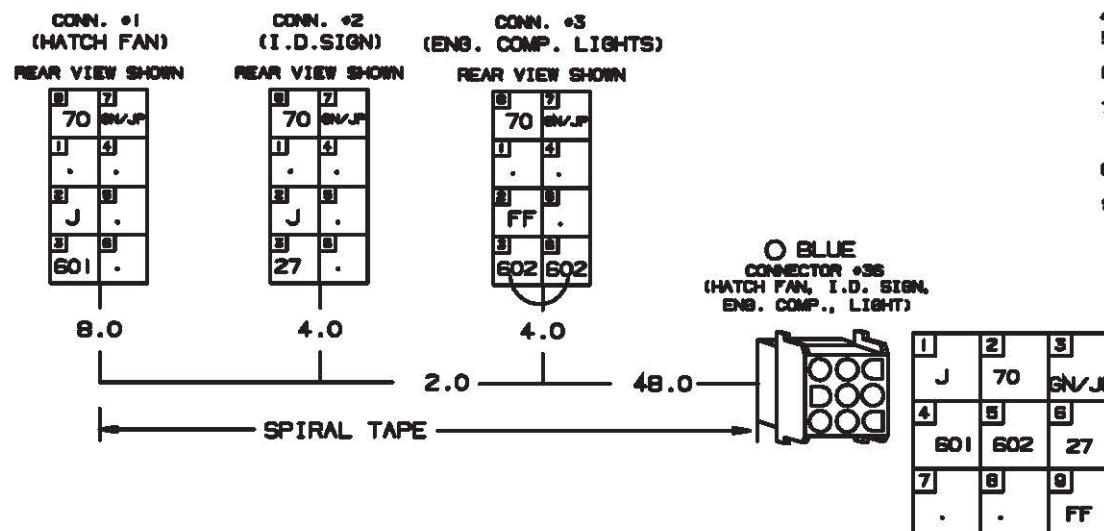
	52002392 B
ROOF ESCAPE HATCH w/POWER VENT TRANSPEC, MODEL 1600	
End Date: 9/5/02	

CONN	VENDOR	PART #	DESCRIPTION	QTY
1, 2, 3	CARLINS	88816718001	SWITCH CONNECTOR	3
	PED	XX	18-20 GA TERMINAL	X
	PED	XX	14-16 GA TERMINAL	X
36	AMP	XX	14-16 GA. TERMINAL, PIN.	X
	AMP	XX	10-12 GA. TERMINAL, PIN.	X
	AMP	770028-1	6 POSITION CONNECTOR, CAP.	1

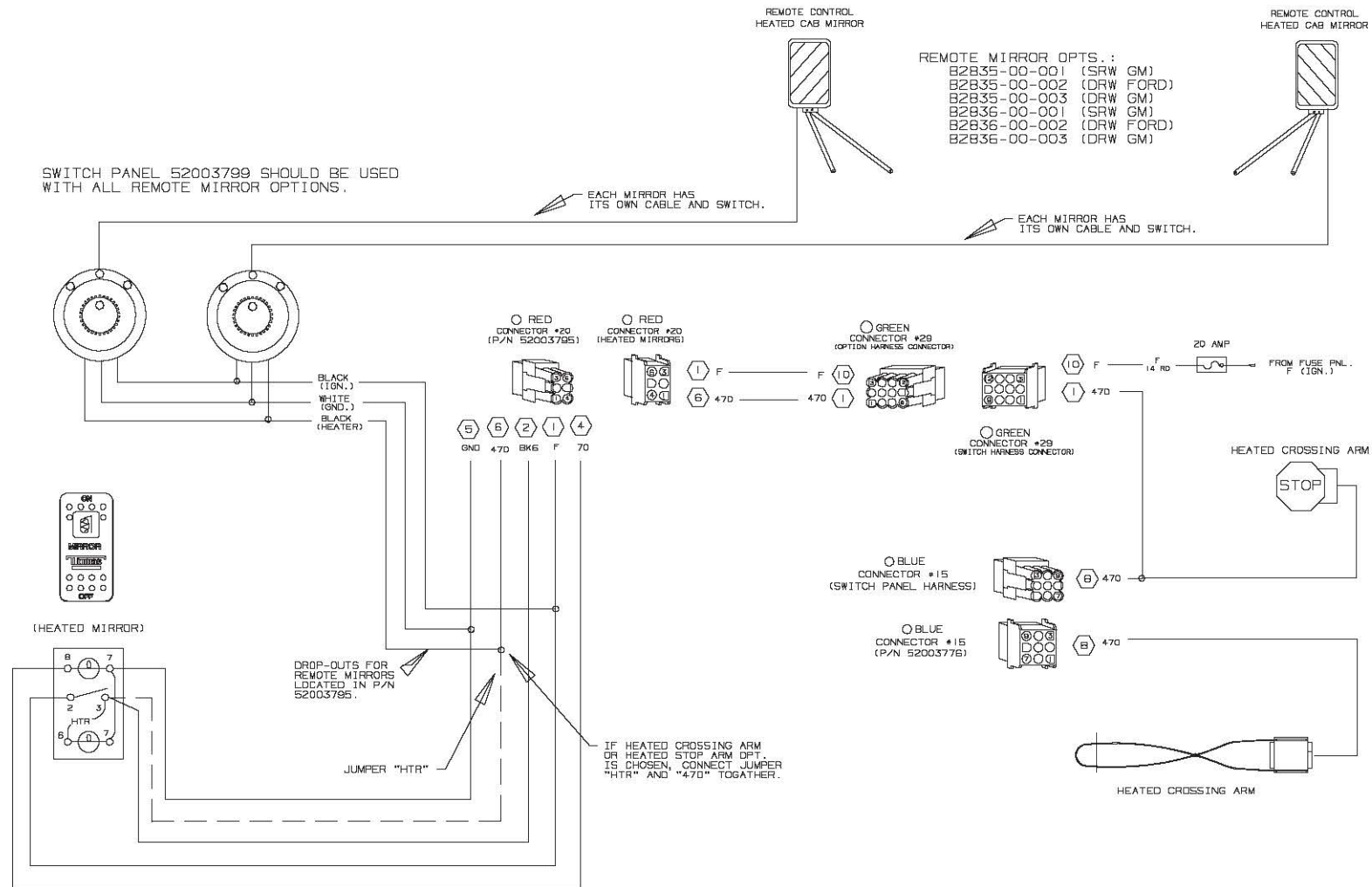
LEAD #	AWG	COLOR	DESCRIPTION
601	18	BLUE	ESCAPE HATCH FAN FEED (+).
27	18	BLACK/WHITE	I.D. SIGN FEED (12V+)
602	18	BLACK	ENG. COMP. LIGHT FEED (+)
GN/JF	18	GREEN	SWITCH LIGHT GROUND.
70	18	WHITE/BLACK	SWITCH LIGHT FEED (+).
J	18	RED	FROM FUSE PANEL (IGN.), ACC. POWER.
FF	18	RED	FROM FUSE PANEL (BATT), INTERIOR LOTS.

# NOTES:


1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "S" ON ALL LEADS.
2. TAG HARNESS FOR IDENTIFICATION.
3. REFER TO DWG. #52001138 FOR HARNESS SPECIFICATIONS.
4. SPIRAL TAPE SPACING SHOULD BE 1 INCH.
5. WHERE "X" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEED FOR TERMINATION.
6. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
7. CONNECTOR 36 SHOULD BE TAGGED APPROPRIATELY 1 INCH FROM CONNECTOR BODY.  
EXAMPLE: CONN. 36 TAG SHOULD READ "HATCH FAN, I.D. SIGN, & ENG. COMP. LIGHT"
8. CONNECTOR 1-3 SHOULD BE TAGGED APPROPRIATELY. PLACE TAG ON CONNECTOR BODY.
9. USE WIRE TIES TO HOLD HARNESS WHERE NEEDED, MINIMUM AMOUNT AND SIZE.



<b>Thomas</b> SOLUTIONS	52005045 A
HARNESS, ESCAPE HATCH FAN, I.D. SIGN, ENGINE COMPARTMENT LIGHT, SWITCH	
Effective Date: 9/5/01	



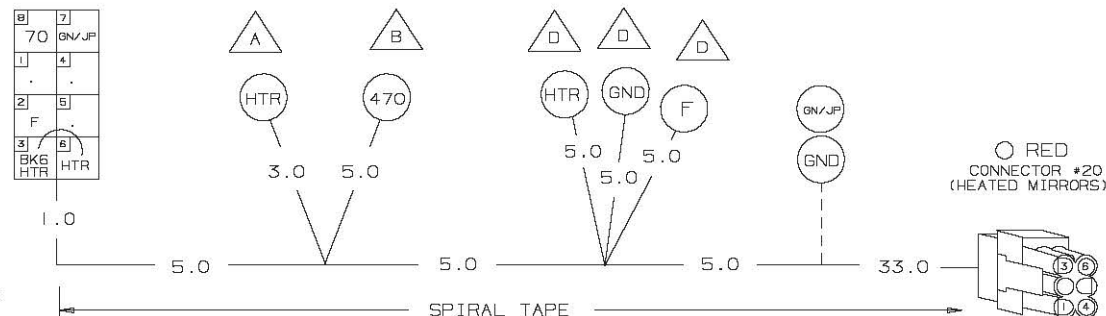
HEATED REMOTE MIRRORS, CROSSING ARM, AND STOP ARM  
MINOTOUR MODELS SRW, DRW

	52003996 C
REMOTE MIRRORS	

CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLING	99916716001	SWITCH CONNECTOR	1
	PED	XX	18-20 GA TERMINAL	X
	PED	XX	14-16 GA TERMINAL	X
20	AMP	XX	14-20 GA. TERMINAL, RECEPTICAL.	X
	AMP	XX	10-12 GA. TERMINAL, RECEPTICAL.	X
	AMP	770020-1	6 POSITION CONNECTOR, PLUG.	1
RELAY BLOCK	HELLA	97122	HOUSING-RELAY, 5 POSITION.	.
	XX	XX	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	XX	XX	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

LEAD #	AWG	COLOR	DESCRIPTION
70	16	WHITE/BLACK	SWITCH PANEL LIGHTS (+).
GN/JF	14	GREEN	SWITCH PANEL LIGHTS (-).
470	14	ORANGE	CROSSING/STOP ARM HEATER POWER FEED.
F	14	RED	FROM FUSE PANEL (IGN.), HTD. MIRRORS/X-ING ARM.
BKG	16	BLACK	HEATED MIRROR RELAY TRIGGER, CAB.
HTR	14	BLUE	JUMPER, SOURCE FOR HEATED X-ING/STOP ARM.
GND	14	BLACK	REMOTE MIRROR GROUND.

CONN. #1  
HEATED MIRROR  
CAB MOUNT  
52003118  
(REAR VIEW)



1	2	3
F	BKG	.
4	5	6
70	GN/JF	470

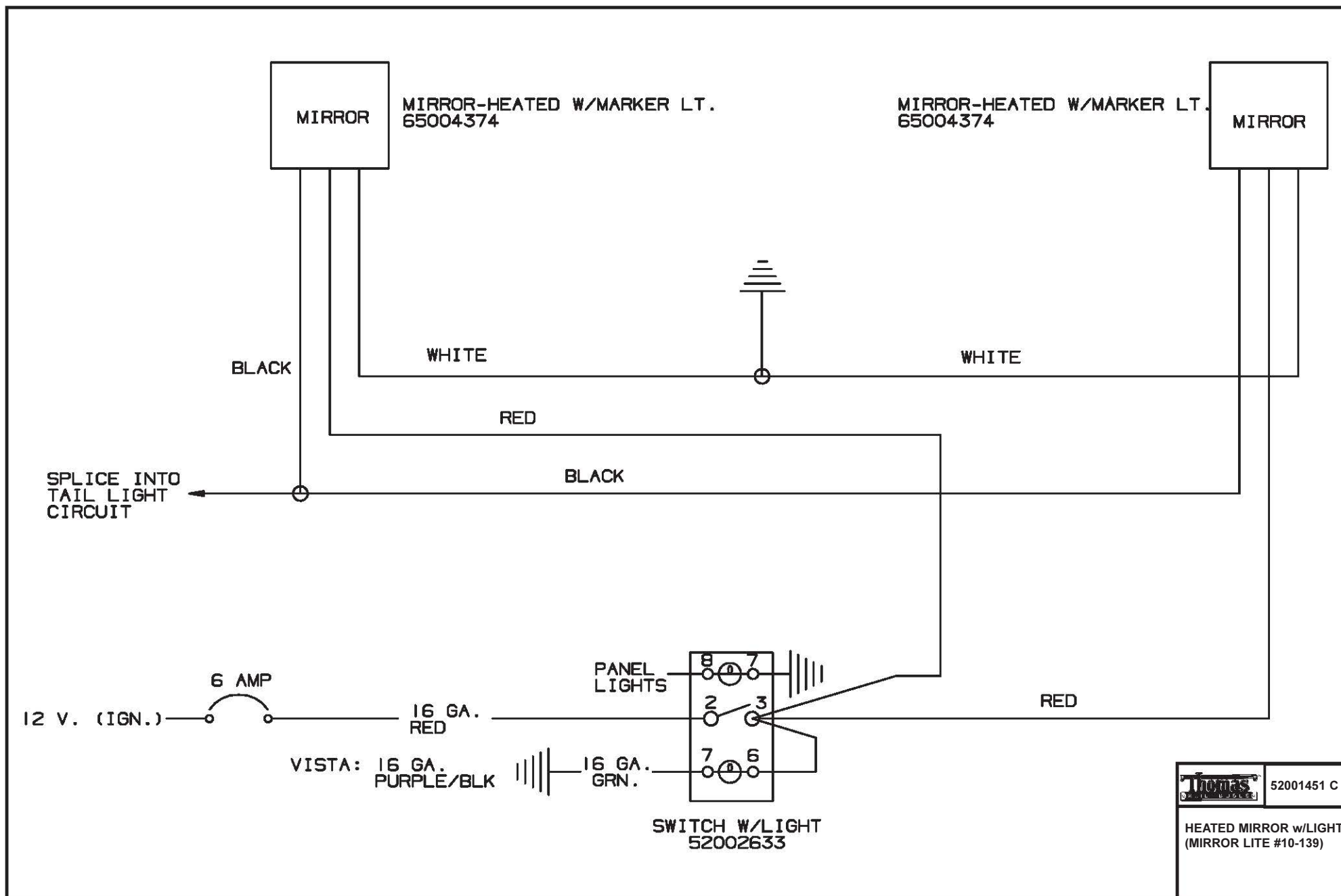
- WHERE "X" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEEDED FOR TERMINATION.
- WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
- CONNECTORS AND BREAK-OUTS MUST FACE AS INDICATED ON THE DRAWING.
- USE WIRE TIES TO HOLD HARNESS WHERE NEEDED, MINIMUM AMOUNT AND SIZE.
- FULLY TAPE HARNESS WHERE HEAVY LINES HAVE BEEN SHOWN. IN TAPED AREAS, THE HARNESS MUST BE SMOOTH AND NON-TWISTED.
- REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
- STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
- TAG HARNESS FOR IDENTIFICATION.
- CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.

NOTES:

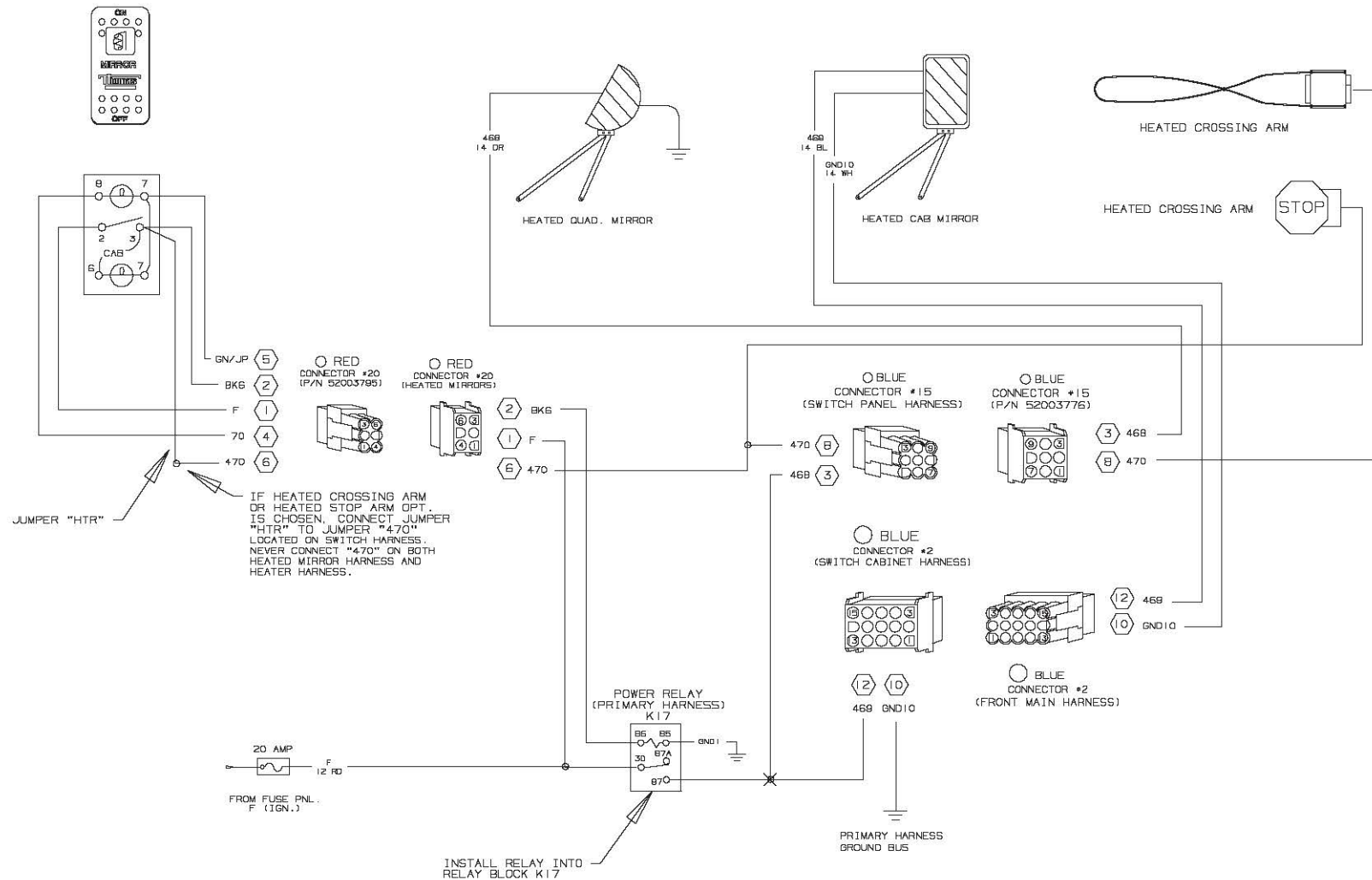
D	XX	XX	BUTT SPLICE, 14-16 GA BLUE.	X
C	XX	XX	RING TERMINAL, #10 STUD, 14-16 GA.	X
B	XX	XX	MALE RECEP., 1/4", 14-16 GA.	X
A	XX	XX	FEMALE FAST-ON, 1/4", 14-16 GA.	X
	VENDOR	PART #	DESCRIPTION	QTY

## HEATED AND REMOTE MIRROR HARNESS

	52003795 D
<b>HARNESS, HEATED MIRRORS</b>	
End Date: 7/29/02	





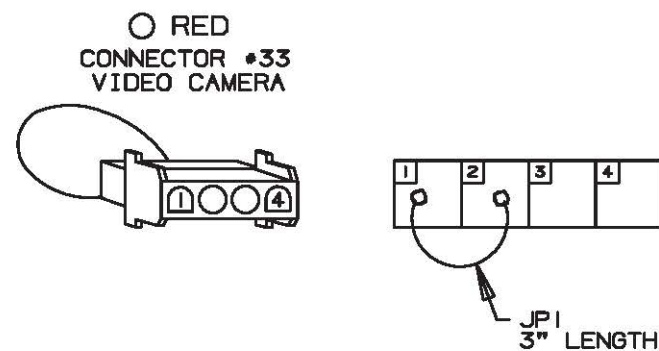


HEATED MIRRORS, CROSSING ARM, AND STOP ARM  
MINOTOUR MODELS SRW, DRW

<b>Thomas</b> SOLUTIONS	52003833 E
<b>HEATED MIRRORS, CROSSING/STOP ARM</b>	
End Date: 7/29/02	

CONN	VENDOR	PART #	DESCRIPTION	QTY
33	AMP	770026-1	4 POSITION CONNECTOR, CAP	1
	AMP	XX	14-16 GA TERMINAL, PIN	X
	AMP	XX	10-12 TERMINAL, PIN	X


CIR	GA	COLOR	DESCRIPTION
JPI	16	RED	JUMPER, CIRCUIT J TO 599.

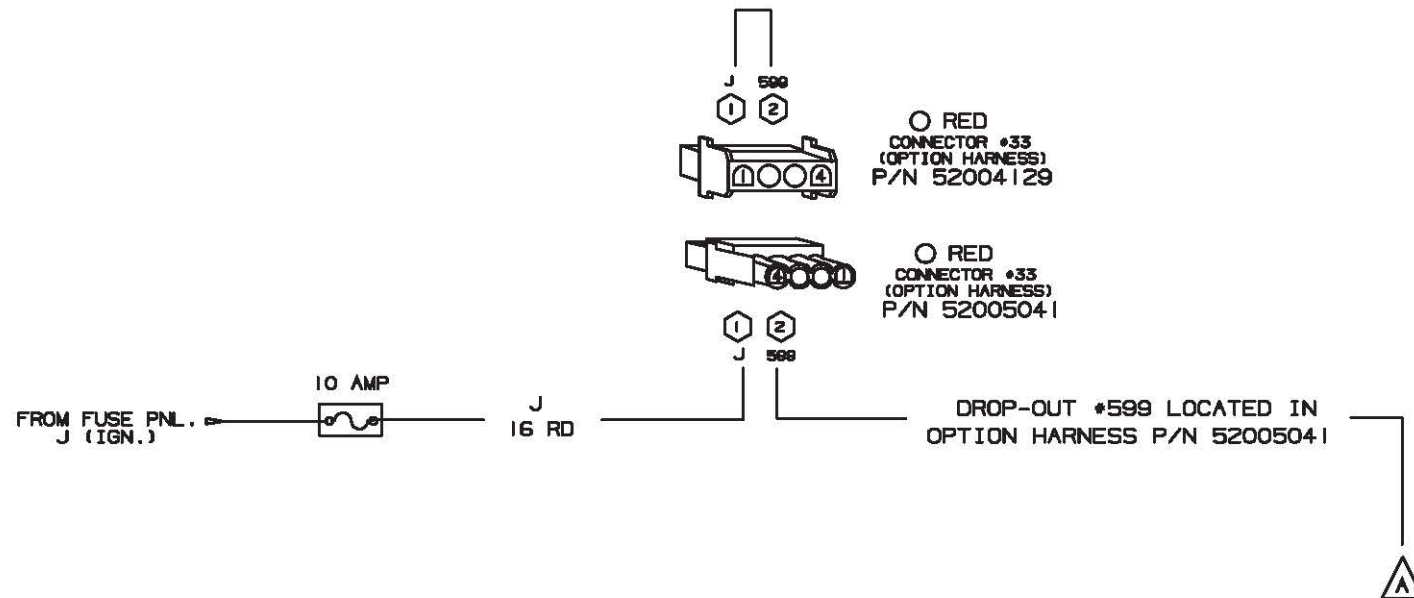


5. WHERE "X" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEEDED FOR TERMINATION.
4. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
3. REFER TO DWG. #52001138 FOR HARNESS SPECIFICATIONS.
2. TAG HARNESS FOR IDENTIFICATION.
1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.

NOTES:


OPTION B2593-00-000

	52004129 B
HARNESS, VIDEO CAMERA POWER SUPPLY	
Option: B2593-00-000 End Date: 9/6/02	



# VIDEO CAMERA POWER SUPPLY OPT. B2593-00-000 SRW, DRW

PART	VENDOR	VENDOR PART NUMBER	DESCRIPTION
A	XX	XX	BUTT SPLICE, 14-16 GA , INSULATED

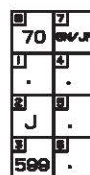
	52004130 E
VIDEO CAMERA	
Option: B2593-00-000 End Date: 9/6/02	

CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLING	99916716001	SWITCH CONNECTOR	1
	PED	12015869	18-20 GA TERMINAL	2
	PED	12015870	14-16 GA TERMINAL	2
33	AMP	770005-1	14-20 GA. TERMINAL, PIN.	4
	AMP	770003-3	10-12 GA. TERMINAL, PIN.	.
	AMP	770026-1	4 POSITION CONNECTOR, CAP.	1
RELAY K1	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

5. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
  4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
  3. FULLY TAPE BREAKOUTS FOR 3"-2" SPACING OTHERWISE.
  2. TAG HARNESS FOR IDENTIFICATION.
  1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B"
- NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
589	18	RED/WHITE	VIDEO CAMERA BOX, FEED (+)
GN/JF	18	GREEN	SWITCH LIGHT GROUND.
70	18	WHITE/BLACK	SWITCH LIGHT FEED (+).
J	16	RED	FROM FUSE PANEL (IGN.), ACC. POWER.

CONN. #1  
VIDEO CAMERA  
SWITCH  
(REAR VIEW)



1.0

49.0

SPIRAL TAPE


○ RED  
CONNECTOR #33  
(VIDEO CAMERA)



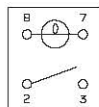
1	2	3	4
J	589	70	GN/JF

VIDEO CAMERA SWITCH  
OPT. B2115-01-000, SRW, DRW

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	.
	VENDOR	PART #	DESCRIPTION	QTY

	52003891 B
HARNESS, VIDEO CAMERA SWITCH	
Option: B2115-01-000	

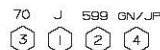
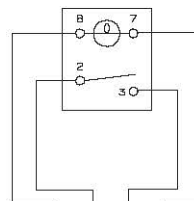
# SWITCH LAYOUT



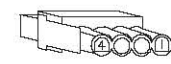
CIRCUIT



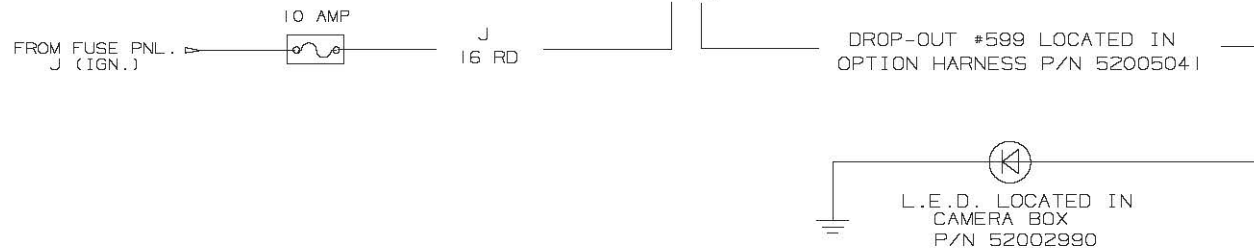
VIDEO CAMERA  
CONNECTOR #1  
(REAR VIEW)



○ RED  
CONNECTOR #33  
(OPTION HARNESS)  
P/N 52003891



○ RED  
CONNECTOR #33  
(OPTION HARNESS)  
P/N 52005041



VIDEO CAMERA POWER SUPPLY  
OPT. B2115-01-000, SRW, DRW



VIDEO CAMERA SWITCH

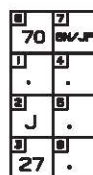
Option: B2115-01-000

CONN	VENDOR	PART #	DESCRIPTION	QTY
1	CARLING	99916716001	SWITCH CONNECTOR	1
	PED	12015869	18-20 GA TERMINAL	2
	PED	12015870	14-16 GA TERMINAL	2
21	AMP	770006-3	14-20 GA. TERMINAL, RECEPTICAL.	4
	AMP	770004-3	10-12 GA. TERMINAL, RECEPTICAL.	.
	AMP	770019-1	4 POSITION CONNECTOR, PLUG.	1
	HELLA	87122	HOUSING-RELAY, 5 POSITION.	.
RELAY KI	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 14-16 GA.	.
	INTERLOCK	.	TERMINAL-FEMALE, 1/4", 10-12 GA.	.

5. STRIP INSULATION BACK 3/8" ON  
UNTERMINATED LEADS.  
4. REFER TO DWG. #52001136 FOR HARNESS  
SPECIFICATIONS.  
3. FULLY TAPE BREAKOUTS FOR 3"-  
2" SPACING OTHERWISE.  
2. TAG HARNESS FOR IDENTIFICATION.  
1. CIRCUIT NUMBERS TO BE STAMPED AT  
4" INTERVALS WITH THE PREFIX "B"  
NOTES: ON ALL LEADS.

LEAD #	AWG	COLOR	DESCRIPTION
27	18	WHITE/BLACK	I.D. SIGN FEED (12V+).
GN/JF	18	GREEN	SWITCH LIGHT GROUND.
70	18	WHITE/BLACK	SWITCH LIGHT FEED (+).
J	18	RED	FROM FUSE PANEL (IGN.), ACC. POWER.

CONN. #1  
I.D. SIGN  
SWITCH  
52003123  
(REAR VIEW)

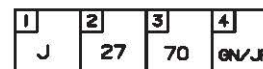


1.0

48.0


SPIRAL TAPE

GREEN  
CONNECTOR #21  
(I.D. SIGN)



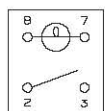
IDENTIFICATION SIGN  
OPT. B5510-OX-000, SRW, DRW

D	.	.	BUTT SPLICE, 14-16 GA BLUE.	.
C	.	.	RING TERMINAL, #10 STUD, 14-16 GA.	.
B	.	.	MALE RECEPT., 1/4", 14-16 GA.	.
A	.	.	FEMALE FAST-ON, 1/4", 14-16 GA.	.
	VENDOR	PART #	DESCRIPTION	QTY

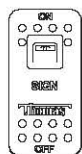
	52003802 B
HARNESS, I.D. SWITCH WIRING	
End Date: 9/5/01	



# SWITCH LAYOUT



CIRCUIT



SIGN

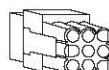
SIGN SWITCH  
CONNECTOR #2  
(REAR VIEW)



BLUE  
CONNECTOR #36  
(HATCH FAN, I.D. SIGN,  
ENG. COMP., LIGHT)

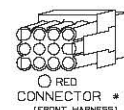


J 27  
1 6



BLUE  
CONNECTOR #36  
(HATCH FAN, I.D. SIGN,  
ENG. COMP., LIGHT)

16WH/BK



RED  
CONNECTOR #16  
(FRONT HARNESS)

FRONT SIGN



GND



REAR SIGN

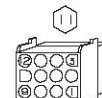


GND



16WH/BK

27



RED  
CONNECTOR #16  
(REAR HARNESS)

+12V  
IGN



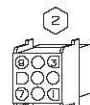
FROM FUSE  
PANEL

J RED

J 27  
1 6

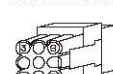
16WH/BK

27



GREEN  
CONNECTOR #29

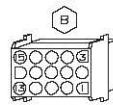
GREEN  
CONNECTOR #29  
(SWITCH CABINET HARNESS)



27

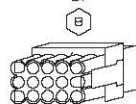
16WH/BK

27



BLUE  
CONNECTOR #2  
(SWITCH CABINET HARNESS)

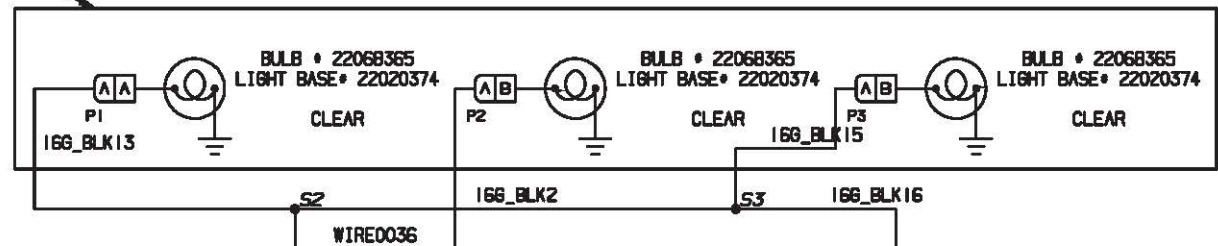
27



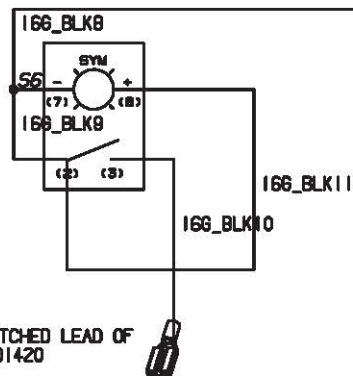
BLUE  
CONNECTOR #2  
(FRONT HARNESS)

	<p>52003836 D</p>
<p>ID SIGN</p>	

LIGHTED BOX, FRONT OF BUS

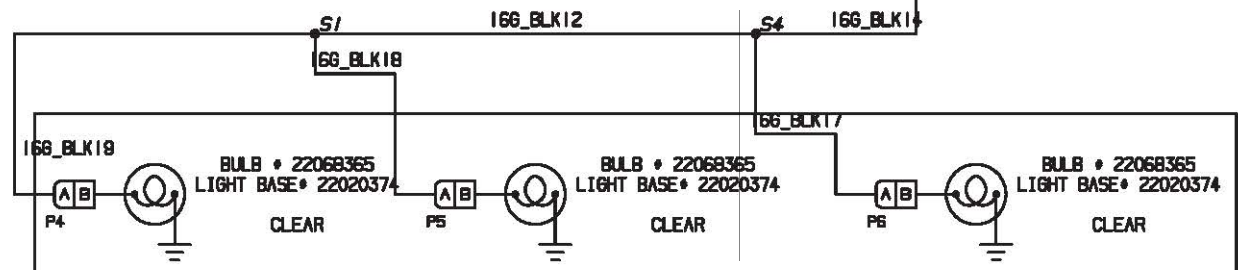



SW-1 SPST/PILOT  
PN: 52003739

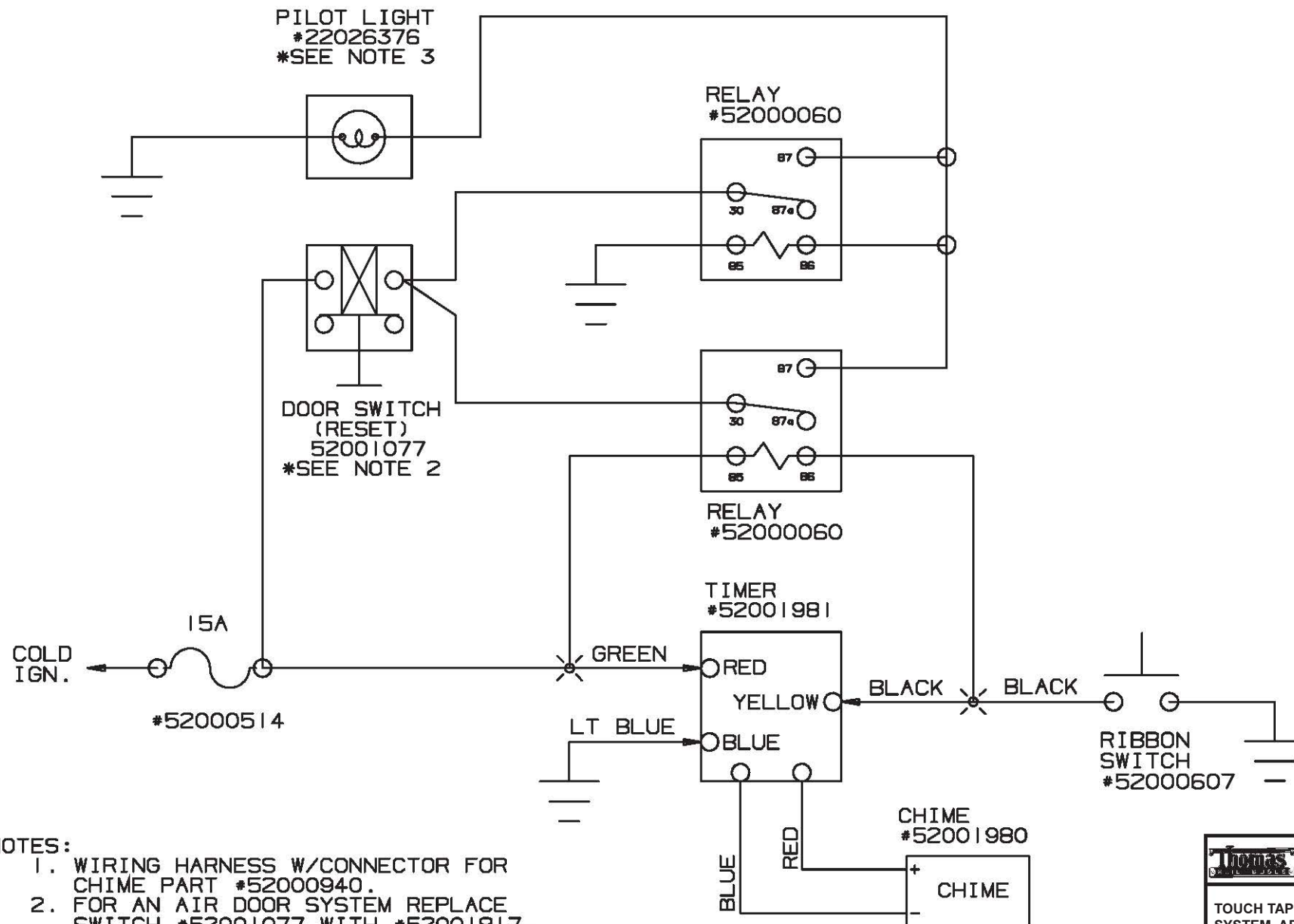


CONNECTION TO UU SWITCHED LEAD OF  
FUSE PANEL P/N: 156001420  
12 V DC

LIGHTED BOX, REAR OF BUS




	52005020 A
LIGHTRF IDENTIFICATION SIGN	
Effective Date: 4/6/01	



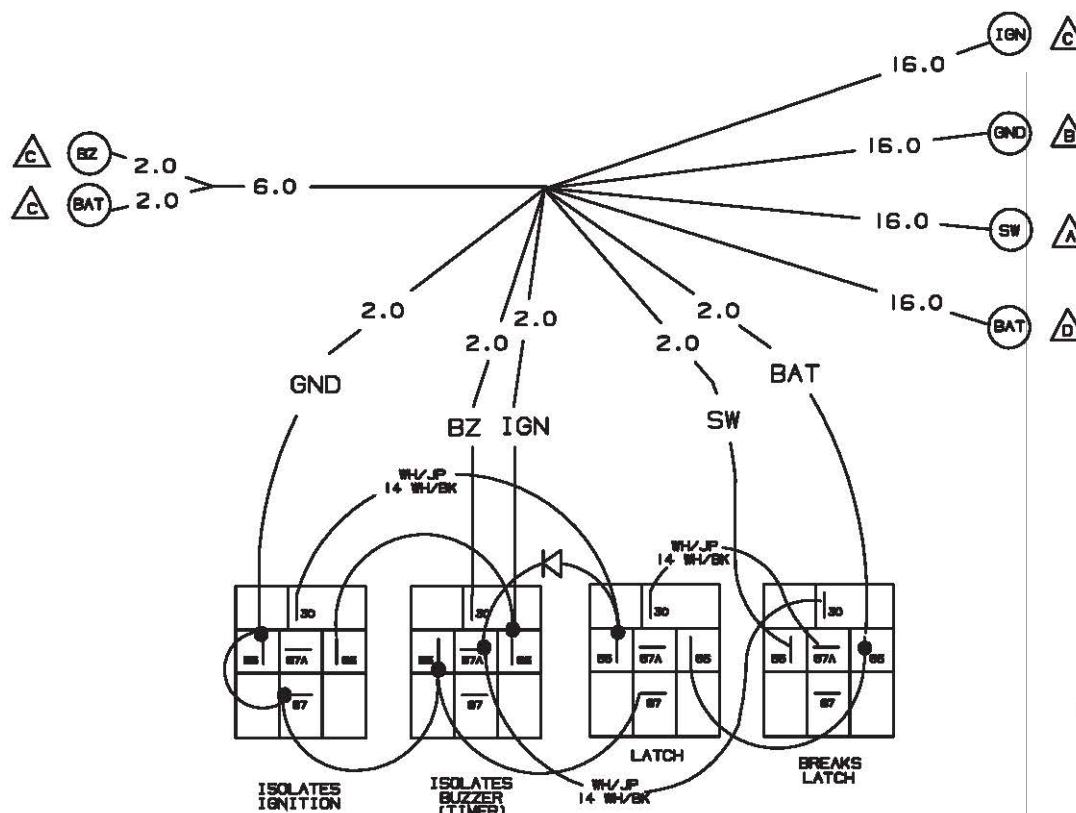
NOTES:

1. WIRING HARNESS W/CONNECTOR FOR CHIME PART #52000940.
2. FOR AN AIR DOOR SYSTEM REPLACE SWITCH #52001077 WITH #52001817.
3. FOR M-BODY USE PILOT LIGHT IN BODY PILOT ASM. #6221000.

	52001843 D
TOUCH TAPE CHIME SYSTEM, ADA STOP REQUEST	

CONN	VENDOR	PART #	DESCRIPTION	QTY
RELAYS			RELAY BLOCK	4
	AMP	.	TERM. 1/4" LOCKING FEMALE (FOR RELAY)	16
DIODE	.	.	1 AMP 400 VOLT	1

CIR	GA	COLOR	DESCRIPTION
BZ	14	YELLOW	OUTPUT TO BUZZER/HORN
IGN	18	ORANGE	TRUE IGNITION INPUT
GND	14	WHITE	GROUND
BAT	18	RED	12 V+ FROM BATTERY
SW	18	GREEN	DEACTIVATION INPUT
WH-JP	14	WHITE/BLACK	JUMPER FOR RELAY BLOCK
.	.	.	.




4. STRIP INSULATION BACK 5/8" ON UNTERMINATED LEADS.  
3. REFER TO CIR. #B2001-00-000 FOR HARNESS SPECIFICATIONS.  
2. TAB HARNESS FOR IDENTIFICATION.  
1. CIRCULAR MARKING TO BE STAMPED AT 2" INTERVALS WITH THE PREFIX "B".  
NOTES: ON ALL LEADS.

RELAY CONNECTORS  
BOTTOM VIEW

.	.	.	.	.
D	.	.	FEMALE PUSH ON, 1/4", 14-16 GA.	1
C	.	.	TERMINAL SPRING SPACE, #10 STUD	3
B	.	.	#10 RING 14-16 GA.	1
A	.	.	BUTT SPLICE 14-16 GA.	1
VENDOR	PART #	DESCRIPTION	QTY	

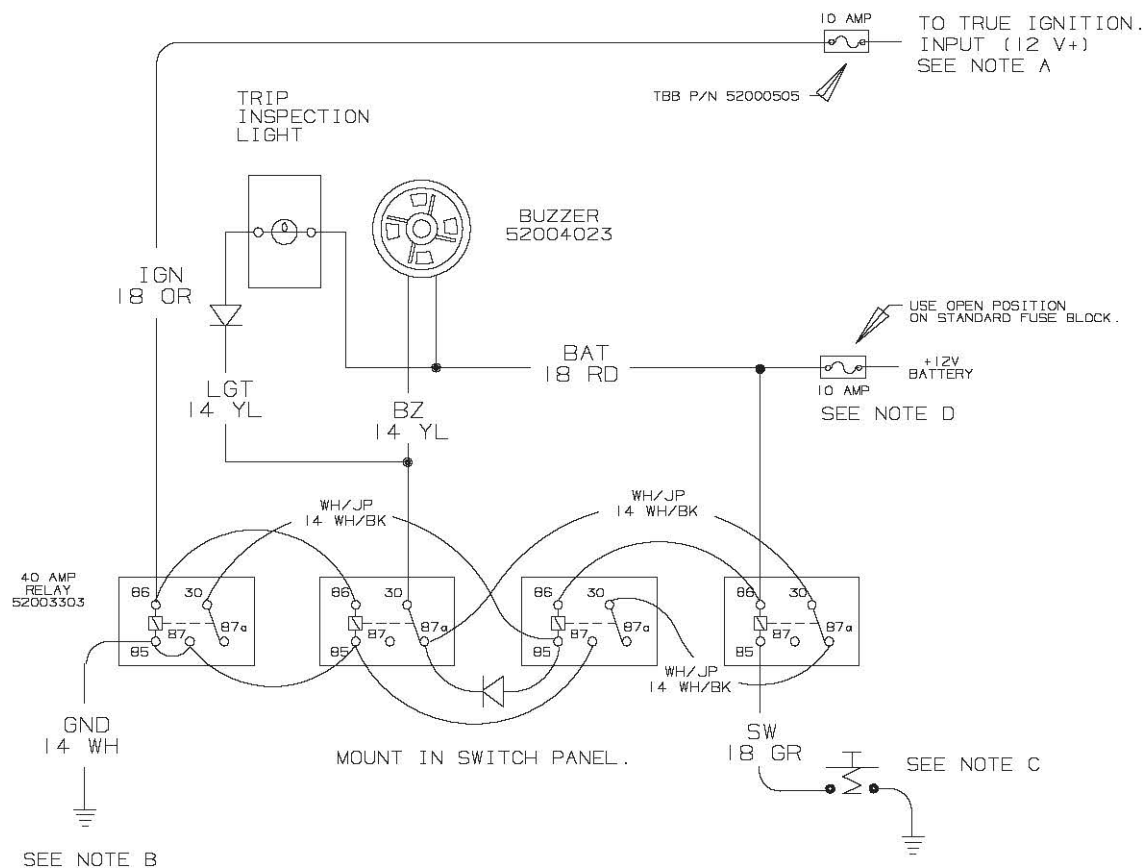
OPTION: B2001-00-000

APPROVED VENDOR: E.S.I  
1200 JAY LANE  
GRAHAM, NC 27263

	52003460 B
HARNESS, PASSENGER ADVISORY SYSTEM	
End Date: 2/26/01	

CONN	VENDOR	PART #	DESCRIPTION	QTY
RELAYS			RELAY BLOCK	4
	AMP	.	TERM. 1/4" LOCKING FEMALE (FOR RELAY)	16
DIODE	.	.	1 AMP 400 VOLT	2

CIR	GA	COLOR	DESCRIPTION
BZ	14	YELLOW	OUTPUT TO BUZZER/HORN
IGN	18	ORANGE	TRUE IGNITION INPUT
GND	14	WHITE	GROUND
BAT	18	RED	12 V+ FROM BATTERY
SW	18	GREEN	DEACTIVATION INPUT
WH/JP	14	WHITE/BLACK	JUMPER FOR RELAY BLOCK
LGT	14	YELLOW	OUTPUT TO LIGHT



OPTION: B2001-00-000

## INSTALLATION NOTES

A. IGNITION SOURCE MUST NOT BECOME COLD WHEN KEY SWITCH IS IN START POSITION.  
USE FUSED SOURCE, MINIMUM CURRENT REQUIREMENT.

### WIRE LOCATIONS:

MVP-ER: ROUTE TO IGN. BREAKER #8, FOURTH FROM BOTTOM IN SIDE PANEL ABOVE IGN PWR RELAY.

MVP-EF: ABOVE IGN. POWER RELAY. 12 POS. DIST. BLOCK. USE OPEN SLOT IF POSSIBLE, FUSE AT 10 AMPS.

FREIGHTLINER CONV.:  
ON FUSE BLOCK, PASSENGER SIDE OF BUS SINGLE MALE TERMINAL, POSITION #14

NAVISTAR CONV.:  
WIRE 13B (PINK 16 GA.) LOCATED IN DRIVER KICK PANEL AT BUZZER RELAY.

FORD MINOTOUR:  
10 GA. RED/GREEN LOCATED IN HARNESS AT STEERING COLUMN. (IGN SWITCH HARNESS) DO NOT CUT RED/GREEN WIRE. FUSE AT 10 AMPS USE FUSE HOLDER P/N 52000505.

GM MINOTOUR:  
10 GA. PINK WIRE LOCATED IN HARNESS AT STEERING COLUMN. (IGN SWITCH HARNESS). DO NOT CUT PINK WIRE. FUSE AT 10 AMPS WITH P/N 52000505.

B. CLEAN CHASSIS GROUND.

C. DEACTIVATION SWITCH IS PUSH BUTTON STYLE SWITCH P/N 52002965. PROVIDES GROUND WHEN DEPRESSED. MOUNTED HIGH IN REAR OF BUS ON THOMAS LOGO PANEL. SEE DRAWING 52003491.

D. CONSTANT 12V+ SOURCE FUSED AT 10 AMPS.



PASSENGER ADVISORY  
SYSTEM (MARYLAND)

Option: B2001-00-000

CONN	VENDOR	PART #	DESCRIPTION
1	CARLINS	99916718001	SWITCH CONNECTOR
	XX	XX	18-20 GA TERMINAL
	XX	XX	14-16 GA TERMINAL
35	XX	XX	14-20 GA. TERMINAL, PIN.
	XX	XX	10-12 GA. TERMINAL, PIN.
	AMP	770027-1	6 POSITION CONNECTOR, CAP.

LEAD #	AWG	COLOR	DESCRIPTION
JP1	18	BLACK	SWITCH JUMPER, L.E.D. LIGHT
GN/JP	18	GREEN	SWITCH LIGHT GROUND.
70	18	WHITE/BLACK	SWITCH LIGHT FEED (+).
J	18	RED	IGNITION FEED.
425	18	BLACK	NOISE SOLENOID TRIGGER (+).

CONNECTOR #1  
(REAR VIEW)

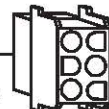
8	7
70	GN/JP
1	3
425	.
2	5
J	.
3	6
JP1	JP1

1.0

48.0

SPIRAL TAPE


○ GREEN  
CONNECTOR #35  
(NOISE REDUCTION)



1	2	3
J	.	.
4	5	6
70	GN/JP	425

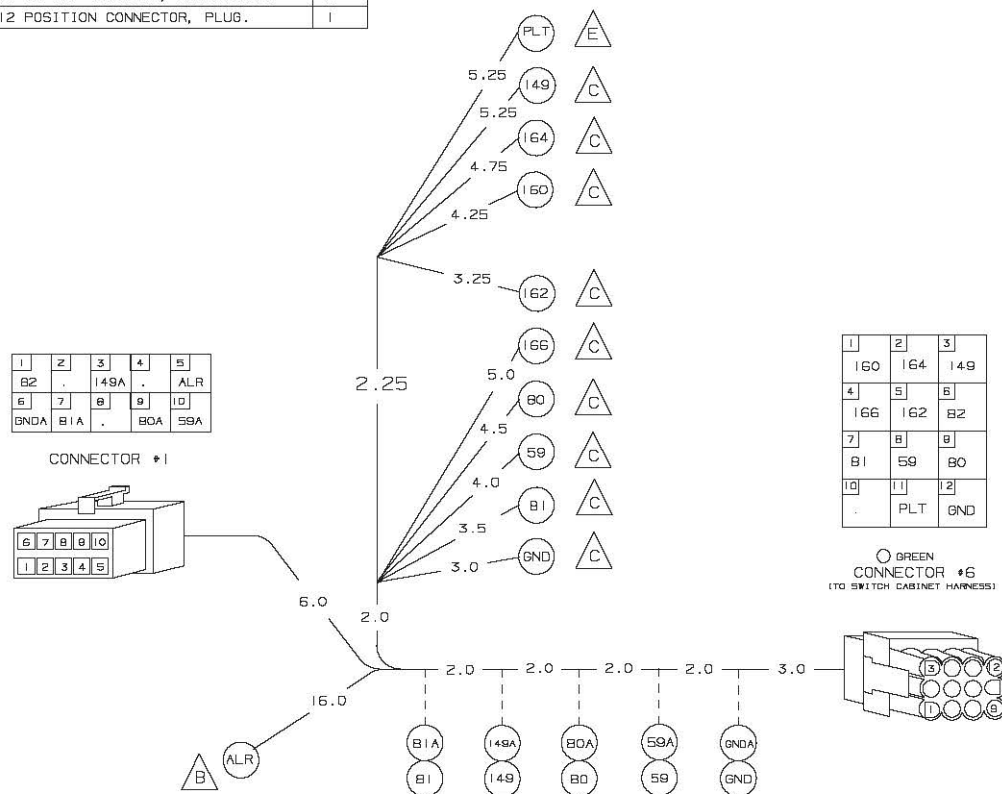
# NOTES:

1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.
2. TAB HARNESS WITH CORRESPONDING PART NUMBER. TAB SHOULD BE LOCATED 2 INCHES FROM CONNECTOR #1.
3. TAB HARNESS "NOISE REDUCTION". TAB SHOULD BE LOCATED 1 INCH FROM CONN. #35.
4. SPIRAL TAPE SPACING IS TO BE ONE INCH.
5. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED FOR TERMINATION.
6. USE WIRE TIES TO HOLD HARNESS WHERE NEEDED, MINIMUM AMOUNT AND SIZE.
7. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.

	52004711 B
HARNESS, NOISE REDUCTION SWITCH	
End Date: 9/5/02	



CONN	VENDOR	PART #	DESCRIPTION	QTY
1	XX	XX	14-16 GA. TERMINAL, RECEPTICAL.	X
	XX	XX	10-12 GA. TERMINAL, RECEPTICAL.	X
6	MOLEX	39-01-2100	10 POSITION CONNECTOR, PLUG.	1
	AMP	XX	14-16 GA. TERMINAL, RECEPTICAL.	X
	AMP	XX	10-12 GA. TERMINAL, RECEPTICAL.	X
	AMP	770022-1	12 POSITION CONNECTOR, PLUG.	1



LEAD #	AWG	COLOR	DESCRIPTION
149	12	BLACK	FLASHER POWER.
149A	16	BLACK	CHILD ALARM POWER.
164	12	BLUE	WARNING LIGHT MONITOR FEED. (AMBER)
160	12	BLACK	WARNING LIGHT MONITOR FEED. (RED)
82	16	BLUE	FEED TO STOP ARM SOLENOID.
162	12	ORANGE	WARNING LIGHT MONITOR FEED. (RED)
166	12	RED	WARNING LIGHT MONITOR FEED. (AMBER)
80	12	GREEN	ACTIVATION SW. (AMBER) TO FLASHER.
80A	16	GREEN	ACTIVATION SW. TO CHILD ALARM.
59	16	RED/BLACK	DOOR SIGNAL (GND) TO FLASHER.
59A	16	RED/BLACK	DOOR SIGNAL (GND) TO CHILD ALARM.
81	16	BLUE	EMERGENCY SWITCH TO FLASHER.
81A	16	BLUE	FROM CHILD ALARM TO FLASHER, *81.
GND	12	WHITE	FLASHER GROUND.
GND A	16	WHITE	CHILD ALARM GROUND.
PLT	16	RED	PILOT LIGHT FEED FROM CUR. SENSOR
ALR	16	YELLOW	CHILD ALARM OUTPUT TO HORN.

1. CIRCUIT NUMBERS TO BE STAMPED AT 4" INTERVALS WITH THE PREFIX "B" ON ALL LEADS.
2. TAG HARNESS FOR IDENTIFICATION.
3. STRIP INSULATION BACK 3/8" ON UNTERMINATED LEADS.
4. REFER TO DWG. #52001136 FOR HARNESS SPECIFICATIONS.
5. USE WIRE TIES TO HOLD HARNESS WHERE NEEDED, MINIMUM AMOUNT AND SIZE.
6. WHERE "XX" IS INDICATED, USE APPROPRIATE PART AND/OR VENDOR AS NEEDED.
7. WHERE "X" IS INDICATED, USE APPROPRIATE QUANTITIES AS NEEDED FOR TERMINATION.
8. DASHED LINES INDICATE CIRCUIT SPLICES.

NOTES:

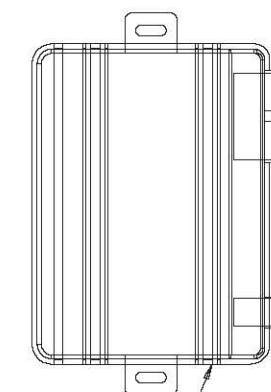
E	XX	XX	MALE BLADE, 3/16" 14-16 GA.	X
C	AMP	520963-2	14-18 GA., 1/4" ULTRA-POD	X
		520974-2	10-14 GA., 1/4" ULTRA-POD	X
B	AMP	770006-3	14-16 GA. TERMINAL, RECEPTICAL.	X
A	XX	XX	BUTT-SPLICE, 14-16 GA., INSULATED.	X
	VENDOR	PART #	DESCRIPTION	QTY

52004592 B

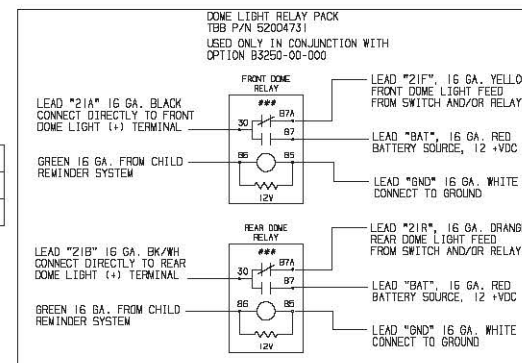
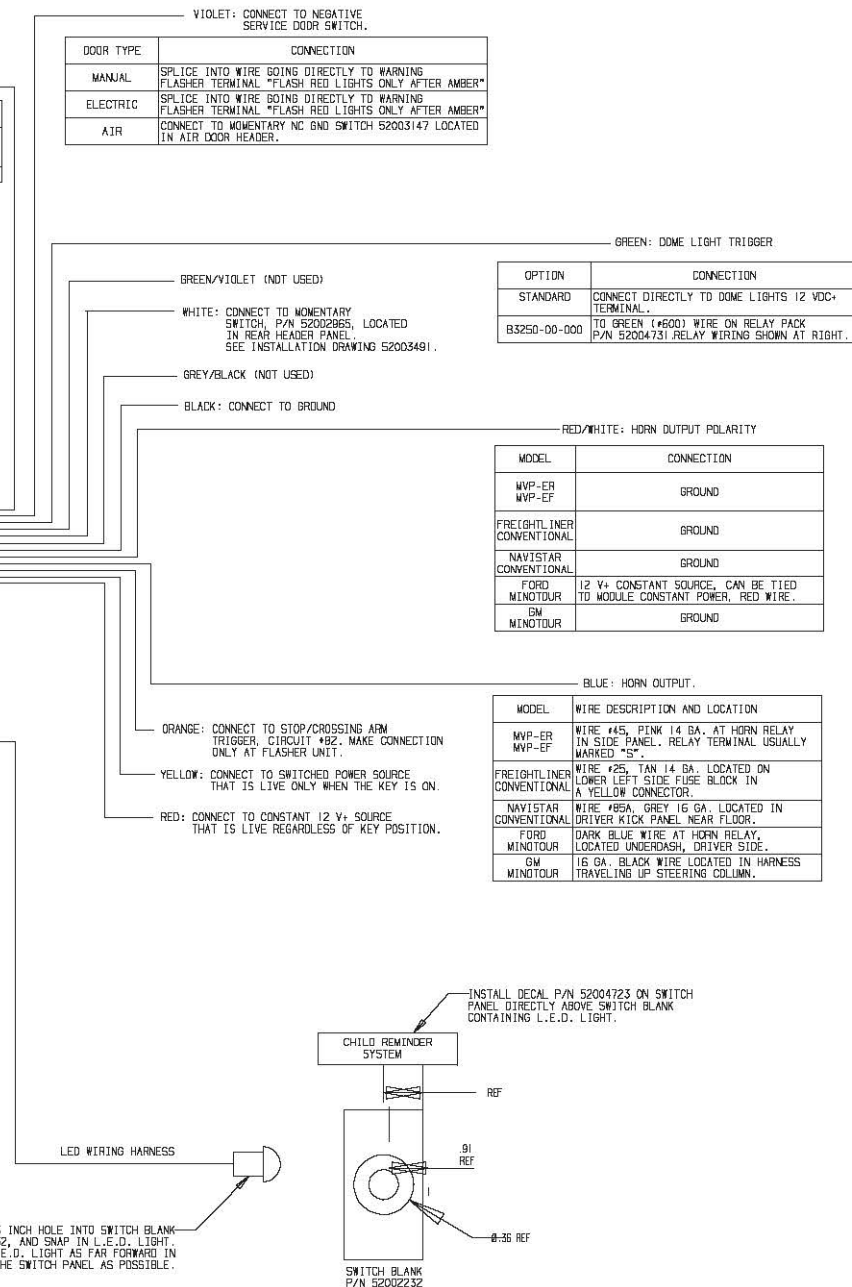
**HARNESS, FLASER AND CHILD SAFTY ALARM**


GREY: CONNECT TO FEED FROM DOME	
OPTION	CONNECTION
STANDARD	CONNECT TO FEED WIRE WHICH DRIVES DOME LIGHTS. CONNECTION MUST BE MADE AFTER ANY SWITCHES OR RELAYS IN THE CIRCUIT.
B3250-00-000	NOT USED. SECURELY CAP AND TIE BACK.

DOOR TYPE	CONNECTION
MANUAL	SPLICE INTO WIRE GOING DIRECTLY TO WARNING FLASHER TERMINAL "FLASH RED LIGHTS ONLY AFTER AMBER"
ELECTRIC	SPLICE INTO WIRE GOING DIRECTLY TO WARNING FLASHER TERMINAL "FLASH RED LIGHTS ONLY AFTER AMBER"
AIR	CONNECT TO MOMENTARY NC GND SWITCH 52003147 LOCATED IN AIR DOOR HEADER.



DRILL A .36 INCH HOLE INTO SWITCH BLANK P/N 52002232, AND SNAP IN L.E.D. LIGHT. LOCATE L.E.D. LIGHT AS FAR FORWARD IN THE SWITCH PANEL AS POSSIBLE.



	<b>52004720 C</b>
<b>CHILD REMINDER SYSTEM</b>	

## SYSTEM OPERATION:

- 1) WARNING FLASHER START CIRCUIT #90 IS PULSED BY DRIVER TO ENGAGE AMBER WARNING LIGHTS.
- 2) DRIVER OPENS DOOR TO LOAD OR UNLOAD PASSENGERS. RED WARNING LIGHTS ARE FLASHING. CONTROLLER TRIGGERS STOP ARM AND WALK GATE.
- 3) DRIVER CLOSES DOOR AFTER LOADING OR UNLOADING IS COMPLETE. CONTROLLER TURNS OFF STOP ARM AND WALK GATE BUT RED WARNING LIGHTS REMAIN ON WHILE SOUNDING THE ALARM SIREN FOR 6 TO 9 SECONDS (ADJUSTABLE).
- 4) THE ALARM IS USED TO WARN PASSENGERS THAT THE VEHICLE IS ABOUT TO MOVE. AFTER THE TIME EXPIRES, THE CONTROLLER WILL TURN OFF THE RED WARNING LIGHTS AND ALARM SIREN. IT WILL THEN WAIT ANOTHER WARNING LIGHT TRIGGER.

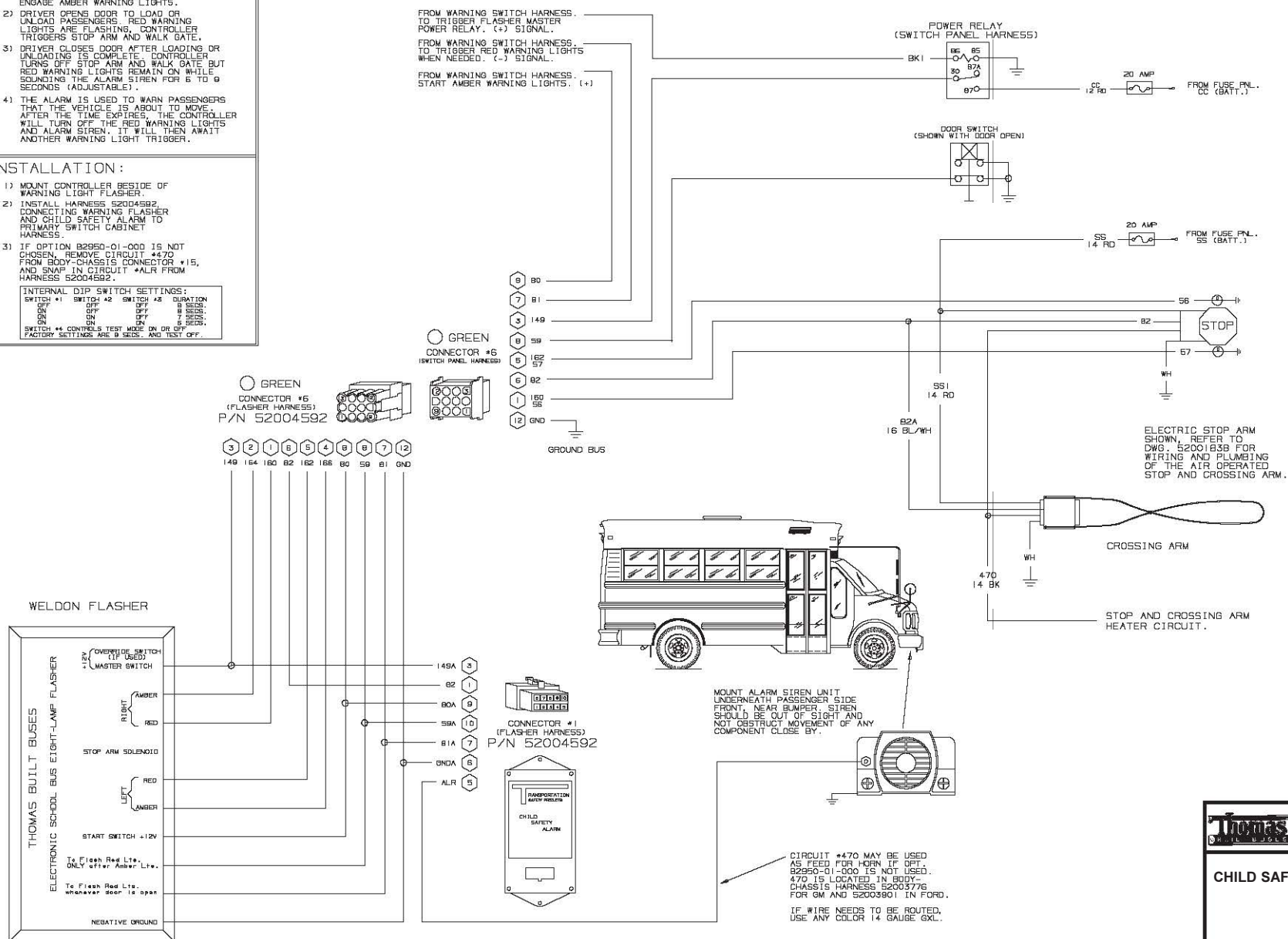
## INSTALLATION:

- 1) MOUNT CONTROLLER BESIDE OF WARNING LIGHT FLASHER.
- 2) INSTALL HARNESS 52004592 CONNECTING WARNING FLASHER AND CHILD SAFETY ALARM TO PRIMARY SWITCH CABINET HARNESS.
- 3) IF OPTION B2950-01-000 IS NOT CHOSEN, REMOVE CIRCUIT #470 FROM BODY-CHASSIS CONNECTOR #15, AND SNAP IN CIRCUIT #ALR FROM HARNESS 52004592.

INTERNAL DIP SWITCH SETTINGS:

SWITCH #1	SWITCH #2	SWITCH #3	DURATION
OFF	OFF	OFF	8 SECS.
ON	OFF	OFF	8 SECS.
ON	ON	OFF	7 SECS.
ON	ON	ON	7 SECS.

SWITCH #4 CONTROLS TEST MODE ON OR OFF  
FACTORY SETTINGS ARE 8 SECS. AND TEST OFF.





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